

PERCEPTION AND COMMON SENSE:  
A STUDY OF TWENTIETH-CENTURY DIRECT REALISM

BY  
GERALD GILMORE TAYLOR

PhD  
UNIVERSITY OF EDINBURGH  
1994



## Abstract

This thesis is a critical examination of the direct realist theory of perception. A common-sense analysis of perception is defended against arguments which are widely believed to rule out the direct realist's notion of a direct contact with external physical reality. I argue that a common-sense version of direct realism can adequately account for hallucinations, perceptual relativity, perceptual illusions, severe time-lags and the causal processes involved in perception. The views of prominent twentieth-century direct realists are critically examined, with the intention of identifying constraints on any plausible direct realist theory of perception. I maintain that there are representationalist tensions in the work of leading twentieth-century direct realists, and that a principal source of these representationalist tensions is their adherence to the common element thesis, the notion that hallucinations and genuine perceptions are the very same experience. Appealing to recent cognitive science experiments on the imagination, I defend a disjunctivist analysis of experience, one which holds that hallucinations and genuine perceptions involve fundamentally different experience-types, rather than sharing a common, world-independent experience. The analysis which emerges is non-epistemic in its denial that perceptual experiences are essentially cognitive. A non-intentional and non-propositional species of perceptual representational content is proposed, one which recognises qualia of perceptual experience. Recent attempts by direct realists to apply Russellian acquaintance to the direct perception of external physical reality are rejected as inconsistent with the central ideas in Russellian acquaintance. Traditional Humean difficulties about the elusiveness of the self in introspection, and the question of how we could know we perceive if we are never acquainted with the self, are addressed by appeal to Russell's largely overlooked notion of learning to be acquainted with objects.



## Declaration

The material which appears in this thesis is the product of original research and writing which I undertook over the period October, 1986 to March, 1994. The work was composed solely by me and is wholly my own.

April 8, 1994  
Date

## Acknowledgments

First and foremost, I would like to thank Dr. Geoffrey Madell for his very patient and thoughtful supervision. I was extremely fortunate to have had the opportunity to work with such a generous and helpful supervisor. It is little wonder that Dr. Madell has earned the respect and affection of so many of his students.

I am very much indebted to Dr. Kenneth Blackwell, Editor, *Russell: The Journal of the Bertrand Russell Archives*, for his numerous helpful comments and suggestions on the chapter "Acquaintance, Physical Objects, and Knowledge of the Self," which appeared in *Russell: The Journal of the Bertrand Russell Archives*, New Series 13 (Winter 1993-94): 168-84. I am grateful to Dr. Blackwell for his permission to include the paper in this dissertation. I also benefited from the comments of an anonymous referee.

I am also grateful to Father Conrad L. Harkins, O.F.M., Editor, *Franciscan Studies*, for his kind assistance and advice with my paper, "Dummett on Retrospective Prayer," which appeared in *Franciscan Studies* 50, Annual 28 (1990): 309-22. Father Harkins has very kindly authorized use of material in the paper in this dissertation. Although I do not quote directly from the article, I draw on material in the paper in my discussion of the necessary conditions of perceiving, especially the relation between Dummettian "quasi-causation" and Russellian "mnemic causation." Dummett's and Russell's views on nomic dependency and genuine connection have a direct bearing on the philosophy of perception. Readers who are interested in a fuller discussion of Dummettian "quasi-causation" are referred to the paper in *Franciscan Studies*.

I am very appreciative for the generous assistance which I received from Professor Martha J. Farah, especially for her clarificatory personal correspondence and for sending a pre-publication copy of her paper, "The Neural Bases of Mental Imagery," forthcoming in *The Cognitive Neurosciences*, M.J. Gazzaniga (ed.), M.I.T. Press.

I am very grateful for the numerous critical comments and suggestions which Professor Antony Flew, Professor Mark Sainsbury and Dr. John Beloff offered on the chapter, "Acquaintance, Physical Objects, and Knowledge of the Self."

I would like to thank Mr. Stig Rasmussen, Mr. Stephen Priest and Dr. Vincent Hope for their kind assistance and warm encouragement.

To my good friends, Professor Cheryl Foster and Dr. David Finkelstein, I owe many thanks for their generous assistance and advice. Their loyalty and commitment helped me through the most difficult stages of this research. I will always be grateful for their help.

Finally, none of this research would have been possible without the endless support and encouragement which I received from my devoted parents, Milt and Dottie, and from my loving wife, Rilu, and mother-in-law, Marie-Luise. They have been patient and loving beyond description. I owe them a debt which I could never begin to repay.

## Table of Contents

Preface	i
Chapter 1: Introduction	
1.1 The Philosophical Theories of Perception	1
1.2 Common-Sense Realism and Subjectively Contributed Content	4
1.3 The Arguments Against Direct Realism	7
Chapter 2: Representationalism and the Common Element Thesis	
2.1 The Causal Theory of Perception and the Common Element Thesis	13
2.2 The Causal Theory, the Common Element and Internally Generated Content	18
2.3 The Causal Theory of Perception and the Disjunctive Analysis of Experience	23
2.4 Disjunctivism and the Causal Argument Against Direct Realism	26
2.5 Snowdon's Argument Against the Causal Theory of Perception	33
Chapter 3: Why the Common Element Thesis Is False	
3.1 Evidence for a Shared Medium of Representation in Imagination and Perception	41
3.2 Pictorialism Versus Descriptivism	44
3.3 Pictorialism and Sperling's Iconic Sensory Storage	46
3.4 Images Are Not Percepts If They Are Not Ambiguous Like Percepts	49
3.5 Why Type-Identical Brain Activity Does Not Entail Type-Identical Experiences	55
3.6 What, Exactly, Are Mental Images and Hallucinatory Experiences?	59
Chapter 4: Are Hirst, Armstrong and Searle Representationalists?	
4.1 Two Interpretations of Representationalism	67
4.2 The Case Against Hirst	70
4.3 The Case Against Armstrong	75
4.4 The Case Against Searle	79
Chapter 5: Intrinsic Looks, Time-Lags, and Strong Externalism	
5.1 Perceptual Relativity and the Selective Theory of Perceptual Content	85
5.2 Intrinsic Looks As Looks To Perspectives in Space	88
5.3 Perceptual Illusions, Causal Descendants, and Objective Appearances	89

5.4	The Bent-Stick Illusion	91
5.5	The Time-Lag Cases	93
5.6	Modified Disjunctivism and Strong Externalism	97
5.7	McGinn's Argument Against Strong Externalism About Perceptual Content	100

## Chapter 6: The Conditions of Perception

6.1	Theories Versus Analyses of Perceiving	108
6.2	Some Necessary Conditions of Perceiving	109

## Chapter 7: Why Perceptual Experience Is Not Essentially Epistemic

7.1	Simple Perceiving and Perceiving As	122
7.2	Epistemic Accounts of Perception	123
7.3	Does Perceiving Entail Attending or Noticing?	126
7.4	Is Perceiving Essentially Conceiving?	129
7.5	Does Perceiving Essentially Involve Epistemic Looks or Appearances?	132

## Chapter 8: Why Perceptual Experience Is Not Intrinsically Intentional

8.1	Intrinsically Intentional and Intrinsically Propositional	138
8.2	Perceptual Objects Versus Perceptual Contents	141
8.3	Facts	145
8.4	That-Clauses	146
8.5	Reference	146
8.6	Predication	148
8.7	Truth-Evaluability	149
8.8	Meaning	153
8.9	Epistemic	153
8.10	Information	155
8.11	Behaviour	157
8.12	Subjectivity	158

## Chapter 9: The Qualia of Perceptual Experience

9.1	Sensational Versus Representational Properties	166
9.2	Qualia Scepticism	167
9.3	Arguments In Favour of Qualia	169
9.4	What It Is Like To Perceive	178

## Chapter 10: Acquaintance, Physical Objects, and Knowledge of the Self

10.1	Introduction	187
10.2	Russell's Notion of Acquaintance	189

10.3	The Attempt to Apply Russellian Acquaintance to Physical Objects	190
10.4	The Indubitability of the Objects of Acquaintance	193
10.5	Russell's Notion of Learning To Be Acquainted	195
10.6	Could Self-Knowledge Ever Be Acquaintance With the Self?	196
10.7	Abstractionism and Acquaintance with the Self	199
Bibliography		210

## Preface

Everybody knows that philosophers debate interminably whether or not the external world can be directly perceived. Everybody expects a philosopher to talk about this question, just as everybody expects linnets to sing....The truth is that philosophers have no choice. They are bound to investigate this problem whether they will or no.

John Laird, *A Study in Realism*, p. 15

Virtually every major figure in twentieth-century British philosophy has written extensively on the topic of perception. The problems of perception were a principal area of interest for Bertrand Russell, G.E. Moore, C.D. Broad, H.H. Price, J.L. Austin, Gilbert Ryle, Ludwig Wittgenstein and A.J. Ayer. There have been major contributions to the philosophy of perception by G.J. Warnock, C.W.K. Mundle, R.J. Hirst, G.N.A. Vesey, F.N. Sibley, Alan R. White, J.M. Hinton, Paul Snowdon, Howard Robinson, Christopher Peacocke, Tim Crane, Don Locke, P.M.S. Hacker and Jonathan Dancy. Influential Australian and American contributors to the philosophy of perception include D.M. Armstrong, Frank Jackson, John R. Searle, Roderick M. Chisholm, George Pitcher, James W. Cornman, Fred I. Dretske, Jerry A. Fodor, Michael Tye, Hilary Putnam and Tyler Burge.

The sheer volume of literature on perception presents several problems for individuals undertaking research in the philosophy of perception. First, because so much has already been said, it is more difficult to say something wholly original. Secondly, it is impossible to cover in depth all of the major areas of interest in the philosophy of perception. In order to say something original and relevant, it is necessary to restrict the scope of the research to a range of topics which can be examined in adequate detail. Unfortunately, this means that a very large body of interesting literature must be left untreated. Finally, the choices which one makes amongst the various topics in the philosophy of perception may themselves become a bone of contention for other philosophers of perception.

With these difficulties in mind, I have chosen to concentrate on one of the three main philosophical theories of perception, direct realism. Although I will discuss its

competitors, representationalism and phenomenalism, this dissertation is primarily an examination of the common-sense version of direct realism. The views of prominent twentieth-century direct realists are critically examined with the intention of determining the direction of theorizing required to arrive at a more accurate and defensible version of direct realism. But it is important to be clear at the outset that this thesis is a defense of direct realism as a philosophical theory of perception, *not* a defense of a theory of direct realism.

The analysis of perception which emerges is non-epistemic in its denial that perceptual experiences are essentially cognitive. Since perceptual experiences can represent objects and events in the external physical world without having to represent them as *being* a certain way, perceptual experiences can have a non-semantic, non-intentional and non-propositional content. A disjunctivist analysis of experience is advanced in which hallucination and genuine perception are held to involve radically different experience-types, rather than sharing a common world-independent experience. But a modified disjunctivism is proposed since I reject the traditional disjunctivist's notion that one and the same proximate neural cause can produce either an hallucinatory experience or a genuinely perceptual experience depending upon the way that the cause is itself brought about. An externalist analysis of perceptual content is defended, one which holds that perceptual content is at least partly determined by mind-independent external existents.

In the course of the argument of the dissertation, I will attempt to demonstrate that there are representationalist implications, or at least representationalist tensions, in the work of leading contemporary direct realists. I will argue that the principal source of these representationalist implications is their acceptance of the Cartesian common element thesis, the view that hallucinatory and genuinely perceptual experiences are type-identical experiences. After explaining why I believe that the common element thesis leads to representationalism, I will attempt to show that the common element thesis is false, that hallucinatory and genuinely perceptual experiences are not the very same experience, by appealing to experimental research on mental imagery. This research shows that hallucinations and genuine perceptions involve altogether different brain processes, and thus altogether different experiences.

Most philosophers of perception take vision as their paradigm case of perception, and build their discussion and examples around the visual modality. Many philosophers boldly claim that their remarks can be generalized to cover the other



senses. I have emphasized vision in the discussion which follows, not because the visual case is especially important, but rather because the vast majority of the experiments on mental imagery to which I will be appealing in my efforts to show that hallucination and genuine perception are not the very same experience have been experiments on *visual* mental imagery. Although the mental imagery experiments which I will cite are not experiments on hallucination *per se*, most cognitive psychologists and philosophers regard hallucination as a species of imagination. Experimental research on mental imagery thus has a direct bearing on the common element thesis that hallucinatory and genuinely perceptual experiences are type-identical experiences.

In the discussion which follows, I will be more concerned with the metaphysics of perceptual experience than its epistemology. I will, for example, be more interested in what perceptual experiences are than in the relationship between perceptual experience and perceptual knowledge or belief. Although my relative inattention to the epistemology of perception will strike many philosophers of perception as surprising, it is a natural consequence of my conviction that there is a form of perception which is wholly free of any actual or would-be judging, knowing, believing or taking to be the case.

But before I begin my discussion of the common-sense version of direct realism, a few brief procedural notes are in order. First, philosophers routinely capitalize both the names of the competing theories of perception and the names of the arguments leveled against these theories. They also frequently capitalize the names of the various notions employed in the arguments. Since most of this over-capitalization is unnecessarily cumbersome, and adds nothing whatsoever to the argument, I have chosen not to capitalize the names of the theories, arguments and notions. Secondly, recent philosophical interest in the representational theory of the mind has created circumstances in which talk of the representational theory of the mind could be mistaken for talk of the representative theory of perception, and vice versa. When it is not clear from the context if I am speaking of the representative theory of perception or the representational theory of the mind, I will speak of "perceptual representationalism" to indicate that it is the theory of perception, and not the theory of mind, which I mean by "representationalism." Thirdly, all italicization in the quotes which follow is original. No emphasis has been added. Fourthly, reference is made throughout the dissertation to various perceptual phenomena and illusions, such as Benham's colours, the Müller-Lyer illusion and impossible figures such as the Penrose triangle. Should any of these phenomena or illusions be unfamiliar to the reader, they are illustrated and described in



most introductory textbooks on sensation and perception. Particularly accessible introductions to these phenomena and illusions may be found in any of the published works of Richard L. Gregory.

## Chapter 1

### Introduction

#### 1.1 The Philosophical Theories of Perception

Modern philosophical theories of sense perception tend to be either phenomenalist, representationalist or direct realist. Representationalism is also referred to as indirect realism or the representative theory of perception. Direct realism is frequently referred to as naive realism or common-sense realism. In general, phenomenism and representationalism hold that internal and private, non-physical existents, like ideas, sense-data or sense-impressions, are the only direct or immediate objects of perception. Direct realism maintains that external and public, physical existents themselves, or at least parts or aspects of them, are directly or immediately perceived. Representationalists agree with direct realists that there is a perception-independent realm of external and public, physical objects, but insist that these physical objects are only indirectly perceived in virtue of directly perceiving the perceptual representatives which these physical objects cause in us.

But what, exactly, do philosophers mean by the terms "naive realism," "common-sense realism" and "direct realism"? Realism, or metaphysical realism, is the view that there is an external and public, physical world which does not depend upon us and our perceptual experiences for its existence and nature. Direct perception is the notion that the objects of perception are directly or immediately perceived. Direct realism is simply the combination of realism and the thesis of direct perception. Direct realism is the view that the external physical world can be perceived directly or immediately and exists unperceived much the way that we perceive it. According to direct realism, we are in direct or immediate contact with external and public, physical existents themselves, rather than with perceptual intermediaries. The mind directly confronts external physical reality in perception. Direct realism differs from phenomenism and representationalism in maintaining that the direct or immediate objects of perceptual awareness are always external physical existents.

Direct realism is thus the view that we can perceive external physical objects directly or immediately. The direct or immediate objects of perception are extra-mental existents which do not depend for their existence and nature upon being perceived, and

continue to exist on their own much the way they are perceived. Indirect realism or representationalism is simply the rejection of direct realism, and thus the view that we cannot perceive external physical objects directly or immediately, that we can never directly perceptually confront external physical reality. Like direct realism, representationalism accepts the existence of an external physical reality, but unlike direct realism, representationalism places that reality beyond the reach of direct perceptual apprehension. Representationalism maintains that all we are ever directly perceptually aware of are internal and private, non-physical objects or contents, from which we must then make assumptions or inferences about the existence and nature of the external physical world.

Naive realism and common-sense realism are species of direct realism. Common to both naive and common-sense realism is the direct realist view that the sensible qualities are literally properties of external physical objects. Naive realism is distinguished from common-sense realism by its failure to recognize an appearance/reality distinction, and thus its identification of perceptual appearance with reality. Naive realism is simply a more naive version of direct realism, holding that the external physical world is precisely the way it looks or appears to us. Unlike naive realism, common-sense realism recognizes that things are not always as we perceive them, and thus recognizes an appearance/reality distinction. Common sense therefore recognizes the possibility of perceptual illusion. Although they are both species of direct realism, common-sense realism is distinguished from naive realism by its relative sophistication.

Balfour points out that the "premises of common knowledge" are "crudely realistic" inasmuch as common-sense realism "proclaims the being of an external world, perceived, yet independent of perception, neither constituted by our thought nor qualified by our senses. Our experiences of it, howsoever limited, we conceive to be direct. We feel it, see it, hear it, smell it, taste it."<sup>1</sup> As a version of direct realism, common-sense realism carries an explicit commitment both to realism, the notion that there is a mind-independent physical world, and direct perception, the notion that the objects of perception are directly or immediately perceived. Together, these views entail that we can directly or immediately perceive items in the mind-independent physical world. Common-sense realism is a thesis both about what there is in the world and about our relation to it. It maintains that there is a world of things not dependent for their existence and nature upon minds and perceptions, things which exist unperceived

largely the way that we perceive them, and that we can perceive these things directly or immediately.

Common sense maintains that it is external physical objects themselves, rather than their representatives, with which we are in direct or immediate perceptual contact. Common sense denies that we perceive external physical objects only indirectly by directly perceiving some perceptual intermediary. But we shall see in subsequent chapters that common sense also takes the sensible qualities which feature in our perceptual experiences to be numerically identical to intrinsic properties of external physical objects. The view of common sense, like that of the ordinary language philosopher, is that we cannot perceive what is not there to be perceived, and for the common-sense realist, this means that we cannot perceive what is not there before us in the external physical world. The objects of perception must be external public existents, capable of being perceived by more than one percipient.

Hirst draws attention to the "immediacy assumption" in theories of perception, the assumption that "perception is or involves a direct and unvaryingly excellent immediate awareness of some object"<sup>2</sup> The immediacy assumption of a perfect and unerring awareness leads sense-datum philosophers to conclude that there is a special class of objects of perceptual awareness, and that we are only derivatively aware of external physical objects, if we are aware of them at all, in virtue of being directly or immediately aware of these special non-physical objects. Sense-datum philosophers reason that since perceptual relativity and perceptual illusion show that we can not be perfectly, infallibly or incorrigibly aware of external physical objects, but since we indubitably possess perfect awareness of some existent, it must be something inner or internal to the mind itself which is known perfectly or unerringly in perception.

Sense-datum philosophers who assume that perceptual awareness must be perfect and unerring, and insist that the facts of perceptual relativity and perceptual illusion show that there must be private non-physical objects to bear any apparent properties which cannot be reconciled with intrinsic properties of external physical existents, simply beg the question against the common-sense realist. Since perceptual awareness itself is assumed to be perfect, they reason that any slack in the perceptual situation must be made up in terms of imperfect, private non-physical objects. Indistinctly perceived, external physical objects are accounted for in terms of perfectly perceived, indistinct, private non-physical objects. But if the immediacy assumption is rejected at the outset, and perceptual awareness is allowed to be an imperfect and erring

form of direct contact with external physical objects, then we remove a principal reason for postulating private non-physical objects which intervene between us and external physical reality. Common-sense realism recognizes that perceptual awareness can be both direct and imperfect, and thus rejects the immediacy assumption. The common-sense account of perceptual relativity holds that perceptual awareness varies in its quality, but that inefficient or ineffective perceptual contact may still be direct contact. "To perceive directly," as Baylis notes, "is not necessarily to perceive correctly."<sup>3</sup> The fact that our perceptual experiences are direct does not rule out subjective contributions to perceptual content, and so does not entail a perfect and unerring perceptual awareness of external existents. We do not perfectly perceive an indistinct sense-datum, but instead imperfectly perceive an intrinsically distinct, external physical object.

## 1.2 Common-Sense Realism and Subjectively Contributed Content

There is a surprising amount of disagreement in the philosophical literature about how to define the various theories of perception. It is a principal theme of this dissertation, explored at some length in subsequent chapters, that the traditional interpretation of representationalism, construed in terms of the perception of one thing in virtue of the perception of another, is excessively narrow, and that there is scope for an expanded interpretation of representationalism which does not postulate parallel or duplicate species of perceptual awareness, a direct awareness which takes only internal non-physical objects and an indirect awareness which takes external physical objects. But my principal interest in this chapter is with the various definitions of naive realism, common-sense realism and direct realism, and their bearing on the question of whether we can perceive external physical objects directly or immediately.

Philosophers often fail to distinguish between naive realism, common-sense realism and direct realism, lumping all three theories together in the same category. Searle, for example, claims to defend "'naive' (direct, common sense) realism,"<sup>4</sup> while Robinson speaks both of "Naive, common-sense realism,"<sup>5</sup> and "naive or direct realism."<sup>6</sup> In fact, naive realism and common-sense realism are species of direct realism. Naive realism is simply a more naive version of the direct realist thesis that there is a world of external and public, physical existents which does not depend for its existence and nature upon being perceived, and that we can directly or immediately perceive, or be in direct perceptual contact with, existents in this world. Philosophers often identify common-sense realism with naive realism, but this is an underestimation of the sophistication of common sense. It is fully intelligible to maintain a common-

sense realism while explicitly rejecting the naiveté of naive realism. In what follows, I have chosen to defend a common-sense version of direct realism, although I do not offer a theory or account of direct realism as such. It must be remembered that common-sense realism is just one of several possible versions of direct realism. Although every defense of common-sense realism is necessarily a defense of direct realism, it is possible both to maintain a direct realism and explicitly reject common-sense realism.

Claiming that the common-sense notion about perception is referred to as "naive realism,"<sup>7</sup> Hirst interprets common-sense realism as the view that *none* of the sensible qualities, or the objects which possess them, is "in any way subjective or private to the percipient in the way that dreams are."<sup>8</sup> Robinson similarly insists that "any form of naïve or direct realism...requires that, in ordinary perception, features of the external world constitute the only objects or contents of experience."<sup>9</sup> By interpreting common-sense realism and direct realism as precluding any subjectively or privately contributed content, they believe that common-sense realism and direct realism can be disproved simply by demonstrating a subjective or private contribution to perceptual content. Hirst maintains that the facts of illusion, hallucination, perceptual relativity and the causal and psychological processes involved in perceiving all indicate a subjective and private contribution to perceptual content, and that common-sense realism, and its constituent notion of a simple, direct confrontation with external physical objects and their properties, is therefore false. Robinson similarly holds that the facts of perceptual illusion demonstrate a subjective contribution to perceptual content, and thus disprove direct realism.

But Hirst and Robinson have simply confused naive realism with common-sense realism and direct realism. Wrongly believing that common-sense realism and direct realism are committed to naive realism's notion that things are exactly the way we perceive them, that there is no appearance/reality distinction, they conclude that the facts of perceptual illusion disprove common-sense realism and direct realism. But contrary to what Hirst maintains, the common-sense notion about perception is *not* the naive realist view of perception. Common sense is not nearly as naive as Hirst supposes. Unlike naive realism, common sense recognizes an appearance/reality distinction, and thus recognizes that things are not always the way they look or appear to us. So the facts of perceptual illusion disprove only less sophisticated theories of perception like naive realism, and not more sophisticated theories like common-sense realism. What would be required to refute common-sense realism is evidence that



intrinsically the same experiences, identical experience-types, can occur in the absence of mind-independent existents. Although Robinson and others believe that direct cortical stimulation produces genuinely perceptual experiences, and thus refutes common-sense realism, I will present evidence later that artificial stimulation of areas and processes in the brain involved in perception do not, in fact, produce genuinely perceptual experiences, and thus do not refute common-sense realism.

Similarly, contrary to what Robinson maintains, it is simply not the case that *any* form of naive or direct realism requires that features of the external world constitute the only objects or contents of experience. Unlike naive realism, direct realism recognizes an appearance/reality distinction, and thus recognizes that at least some of the ways that we are appeared to in perception are not ways that external physical objects appear on their own, independent of any perception. Unlike naive realism, direct realism recognizes a subjective contribution to perceptual content, recognizing subjective appearing which cannot be identified with any objective appearances or appearing. But this does not mean that direct realism recognizes subjective perceptual objects or appearances. Direct realism can allow subjective, internally generated *features* of perception without being committed to subjective, internally generated *objects* of perception. Direct realism can intelligibly maintain both (1) that there are subjective, internally generated qualia of perceptual experience which cannot plausibly be identified with intrinsic properties of external physical objects, and (2) that there is only one relation of perceptual awareness, and that this single relation of perceptual awareness takes only external existents, and never internal non-physical existents, as its objects.

In failing to recognize an appearance/reality distinction, naive realism is committed to the view that there can be no internal and private features of perceptual experience, and thus no subjective, internally generated perceptual objects or contents. For the naive realist, things are precisely the way we perceive them. But since a common-sense version of direct realism recognizes an appearance/reality distinction, direct realism is not committed to the view that there can be no internal and private features of perceptual experience, that the *objects* or *contents* of perceptual experience must in every instance be identifiable with intrinsic properties of external physical existents. To be sure, in recognizing only one species of perceptual relation, a relation which takes only external physical objects, direct realism cannot allow for internal and private *objects* of perceptual experience. But it does not follow that direct realism cannot allow for internal and private *features* or *qualia* of perceptual experience. Direct realism is simply not committed to the view that there can be absolutely no subjective

contribution to perceptual content, that perceptual content must be entirely objectively contributed. Direct realism is committed only to the view that there can be no subjective *objects* of perception.

Searle errs in the opposite direction to Hirst and Robinson, construing naive realism as the view that "we sometimes perceive objects directly, and sometimes we perceive them the way they really are."<sup>10</sup> In failing to recognize an appearance/reality distinction, and thus identifying perceptual appearance and reality, naive realism is committed to the stronger view that we *always* perceive objects directly and *always* perceive them the way they really are. But at least Searle's definition of naive realism provides an accurate definition of representationalism. For representationalism is generally construed as the denial of direct realism's claim that we perceive objects directly, and thus the view that we *never* perceive objects directly, and naive realism is a species of direct realism.

### 1.3 The Arguments Against Direct Realism

The facts of perception are widely believed to rule out the common-sense notion of a direct contact or confrontation with items in the external physical world. Hallucinations, perceptual illusions, perceptual relativity, and the various causal, physiological and psychological factors involved in perceiving are all thought to preclude a direct contact or confrontation with external physical objects. In the course of the argument of the dissertation, I will attempt to answer some of the historical criticisms and formal arguments which have been leveled against the common-sense version of direct realism. I argue that the facts of perception, including hallucinations, perceptual illusions, perceptual relativity and the causal processes involved in perceiving, do not, in fact, rule out the direct realist's notion of a direct contact with external physical existents, and I offer a common-sense analysis of these phenomena which is consistent with direct realism.

The principal philosophical arguments against direct realism, and its constituent notion of a direct contact or confrontation with external physical objects, are the argument from hallucination, the argument from perceptual relativity, the argument from causation or physiology, and the time-lag argument. Although there are other arguments leveled against direct realism, such as arguments motivated by the scientific conception of matter and a distinction between primary and secondary qualities, I simply do not have the space in a dissertation to address all of the arguments. Since the



argument from causation or physiology is regarded by most contemporary philosophers of perception as the most serious challenge facing direct realism, I devote several chapters to its exposition and rebuttal. My examination of the argument from causation has a direct bearing on the argument from hallucination and its assumption of an experience common to both hallucination and genuine perception.

In the argument from hallucination, it is claimed that a subject who hallucinates indisputably perceives something, but does not perceive an external physical object, so the subject must perceive something other than an external physical object, and must therefore perceive some sort of internal non-physical object, such as a sense-datum. It is then reasoned that, since hallucinatory experiences are often subjectively indistinguishable from genuinely perceptual experiences, they must be the very same experience, and even genuinely perceptual experiences must involve the perception of internal non-physical objects, rather than external physical objects. Direct realism can survive the argument from hallucination if it can be shown that hallucinatory and genuinely perceptual experiences are not, after all, the very same experience, and so need not take the same internally generated content or objects.

In chapter three, "Why the Common Element Thesis Is False," I will offer evidence from experimental research on mental imagery which shows that hallucinations and genuine perceptions are, in fact, type-distinct experiences. If hallucinations and genuine perceptions are type-distinct experiences, then the direct realist is not compelled to give hallucinatory and genuinely perceptual experiences the very same analysis with respect to experiential content and objects, and genuinely perceptual experiences need not take internal non-physical existents as their objects. The direct realist can maintain a disjunctivist analysis of experience, regarding genuinely perceptual experiences as act/object in structure and maintaining that they take external physical existents as their objects, while regarding hallucinatory experiences as strictly adverbial in structure.

In the argument from perceptual relativity, it is claimed that the way things look or appear to us is a function of the circumstances under which they are perceived, such as the state of our perceptual organs, our expectation and attention, and our location relative to the objects perceived. Since our perceptions vary with differences in the circumstances of perception, but external physical objects do not themselves vary with respect to their intrinsic properties, it cannot be external physical objects themselves which we directly perceive, but must instead be internal and private, non-physical objects like sense-data. A coin looks round when viewed from directly overhead, but

looks elliptical when viewed from an angle. Since the coin itself cannot be both intrinsically round and intrinsically elliptical, either the roundness we directly perceive or the ellipticity we directly perceive cannot be identifiable with an intrinsic property of the coin, and the roundness or ellipticity must therefore characterize a private non-physical existent. But since there is a perfect subjective continuity between the situation when we directly perceive an intrinsic property of the coin, the roundness, and when we directly perceive a property of a non-physical existent, the ellipticity, we must always be directly perceptually aware of internal non-physical existents, and never directly perceptually aware of external physical existents.

In chapter five, "Intrinsic Looks, Time-Lags, and Strong Externalism," I will argue that the facts of perceptual relativity do not compel us to adopt the representationalist's generative theory of sensory content. Direct realism's selective theory of perceptual content can adequately address perceptual relativity if it is recognized that we perceptually select, not from incompatible intrinsic properties of external physical objects, but rather from incompatible intrinsic looks of external physical objects. The fact that a coin cannot be both intrinsically round and intrinsically elliptical, and so we cannot select from its intrinsic roundness or intrinsic ellipticity, does not mean that a coin cannot be both intrinsically round looking and intrinsically elliptical looking. We cannot select from incompatible intrinsic properties but we can select from incompatible intrinsic looks. I will also argue that the notion of directly perceiving causal descendants of external physical objects can account for perceptual illusions which are traditionally thought to pose difficulties for direct realism, such as the bent-stick illusion.

In the argument from causation or physiology, it is claimed that perception is a wholly self-contained experience which can be triggered by physiological mechanisms, and whose occurrence is therefore not dependent upon the occurrence of events in the external physical world. Since the objects of wholly self-contained experiences must themselves be wholly self-contained, the objects of perception cannot be identified with external physical objects, but must instead be internally generated objects. It is reasoned that, if perception is the final link in a causal chain leading from the object perceived to the percipient, then it must be the final link which we directly perceive, and not the external physical objects which initiated that chain.

In chapter three, "Why the Common Element Thesis Is False," I will argue that recent scientific evidence from cognitive psychology shows that direct cortical stimulation of areas of the brain involved in perception is insufficient for generating genuinely

perceptual experiences. The ability to induce experiences by direct cortical stimulation which are subjectively indistinguishable from genuinely perceptual experiences does not entail the ability to induce genuinely perceptual experiences in the absence of appropriate, external physical objects.

In the time-lag or time-gap argument, it is argued that the principles of physical theory, including the finite speed of transmission for light waves, sound waves and neural impulses, entail that the direct objects of perception can not strictly be identified with contemporaneous, external physical existents. Since light from distant stars takes many years to reach the Earth, it is possible that some of the stars which we naively assume we are seeing have already ceased to exist. Some philosophers conclude that we must actually be seeing the past when we look at distant stars because what we see is really the way those stars were many years ago, and not the way they are at this very moment. But since all visual perception involves the transmission of light from the object seen to the percipient, and since all transmission of light is of finite speed, even those objects relatively near to us, such as tables and chairs, cannot strictly be seen as they are at the time of the perception. What we really see is the way that those tables and chairs were a fraction of an instant earlier. Perception cannot therefore involve a direct contact or confrontation with contemporaneous external physical existents, but must instead involve a direct perception of contemporaneous, internal non-physical existents like sense-data.

In chapter five, "Intrinsic Looks, Time-Lags, and Strong Externalism," I will argue that direct realism can adequately address the time-lag argument by allowing that we can perceive the *causal descendants* of external physical objects, namely, external and public, physical existents. The direct realist's notion of a direct perceptual contact with external physical reality does not require that we perceive only external physical objects. The severe time-lags involved in alleged instances of seeing distant stars can be accounted for, not in terms of seeing either the past or internal non-physical objects, but rather in terms of seeing the light from the stars which has only now reached the surface of the Earth.

Lewis announces that "A subject of attitudes can scarcely fail to be intimately acquainted with himself."<sup>11</sup> But the question arises: How, in light of Humean difficulties about the elusiveness of the self in introspection, is acquaintance with the self to be accomplished? In chapter ten, "Acquaintance, Physical Objects, and Knowledge of the Self," I will attempt to answer this question in the course of an examination of recent

attempts in the philosophical literature to extend the extension of Russellian acquaintance to external physical objects. I will argue that any such attempt is ill-conceived since it ignores central elements in Russell's notion of acquaintance. Although I reject the applicability of Russellian acquaintance to direct realism, the application of a non-Russellian account of acquaintance to the direct perception of external objects is held to be unproblematic. I also draw attention to Russell's universally overlooked notion of learning to be acquainted with an object. I consider the question whether self-knowledge could ever be acquaintance with the self, and propose an abstractionist account of self-knowledge which overcomes traditional Humean doubts about introspecting the self. I maintain that we abstract ourselves from introspected complexes of which we are constituents.

Notes

- 1 Arthur James Balfour, *Theism and Thought: A Study in Familiar Beliefs*, London: Hodder and Stoughton Ltd., 1924, p. 108.
- 2 R.J. Hirst, "Perception, Science and Common Sense," *Mind* 60 (1951), p. 484.
- 3 Charles A. Baylis, "Foundations for a Presentative Theory of Perception and Sensation," *Proceedings of the Aristotelian Society* 66 (1965-66), p. 52.
- 4 John R. Searle, *Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987, p. 57.
- 5 Howard Robinson, "The General Form of the Argument for Berkeleian Idealism," in *Essays on Berkeley: A Tercentennial Celebration*, John Foster and Howard Robinson (eds.), Oxford: Clarendon Press, 1988, p. 177.
- 6 *Ibid.*, p. 173.
- 7 R.J. Hirst, *Perception and the External World*, New York: The Macmillan Company, 1965, p. 1.
- 8 *Ibid.*, p. 2.
- 9 Robinson, "The General Form of the Argument for Berkeleian Idealism," p. 173.
- 10 John R. Searle, "Response: Perception and the Satisfactions of Intentionality," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993, p. 189.
- 11 David Lewis, "Individuation By Acquaintance and By Stipulation," *Philosophical Review* 92 (1983), p. 32.

## Chapter 2

### Representationalism and the Common Element Thesis

#### 2.1 The Causal Theory of Perception and the Common Element Thesis

The causal theory of perception maintains that we perceive external physical objects by having perceptual experiences caused *in us* by the appropriate causal action of those objects on our sense organs, and that it is the causal ancestry of our perceptual experiences which determines whether they are hallucinations or genuine perceptions. One and the same experience-type qualifies as either an hallucination or a genuine perception depending upon whether it is caused wholly internally, either by spontaneous brain activity or direct cortical stimulation, or externally by appropriate, external physical objects. Extrinsic causal relations decide between hallucinations and genuine perceptions, rather than anything intrinsic to the experiences themselves. The causal theory of perception holds that hallucinations and genuine perceptions share common looks-states which, when appropriately caused from without, constitute perception. An analogous position is held by the causal theory of knowledge, which maintains that belief and knowledge share common belief-states which, when appropriately caused, constitute knowledge. Just as knowledge is belief plus appropriate causal relations, perception is perceptual experience plus appropriate causal relations to external physical objects. Causal theorists believe that the purpose or function of perception is to deliver perceptual experiences *in us* which *match*, or *correspond to*, the external physical world. They maintain that we have genuinely perceptual experiences without perceiving when our perceptual experiences match or correspond to objects in the external physical world without being caused by those objects.

In its most general form, the common element thesis maintains that hallucinatory and genuinely perceptual experiences are intrinsically the same experience, and are thus type-identical experiences. The common element thesis holds that hallucinations and genuine perceptions share common looks-states, and assumes that looks-states themselves constitute experience-types common to hallucinations and genuine perceptions, rather than being common ingredients or components in distinct experience-types involved in hallucinations and genuine perceptions. The common element thesis assumes various forms in the philosophical literature on perception. The common component in hallucination and genuine perception is construed by Searle,



Unger and Stainsby as a common experience, by Hirst as a common adverbial consciousness and by Armstrong as a common judgment or belief acquisition, and thus a common propositional representational content. Language of thought theorists presumably construe the common element in hallucination and genuine perception as a common relation to a token of mentalese.

Properly construed, the common element thesis maintains, not simply that hallucinatory and genuinely perceptual experiences are the same phenomenally, qualitatively or subjectively, but also that they are the same intrinsically, and are thus type-identical experiences. The question is not whether perception and its perfect illusion have something in common, for, as Hinton observes, "it would be very strange indeed to declare that a perception and its perfect illusion had nothing in common."<sup>1</sup> The question, instead, is whether perception and its perfect illusion are type-identical experiences. Budd notes that Wittgenstein recognizes a sense in which seeing and visualizing have the same "experiential content," but opposes "the idea that seeing and visualising involve the same state of consciousness"<sup>2</sup> which qualifies as a visual impression when appropriately caused by the external world. Wittgenstein denies that there is a "common element of the states of seeing and visualizing."<sup>3</sup>

Hinton considers the question whether there is "an experience which occurs both when you perceive that p and when you have the illusion of doing so."<sup>4</sup> Like Wittgenstein, he concludes that there is a common element in hallucination and genuine perception, that hallucinatory and genuinely perceptual experiences are the same experience, but that this only means that we have experiences which are the same "experientially or subjectively or 'qualitatively'."<sup>5</sup> Hinton rightly argues that "The perfect illusion is the same experience as the perception" only in so far as they are "experientially, subjectively the same."<sup>6</sup> He cautions us that we must not "twist subjectively indistinguishable events into indistinguishable subjective events."<sup>7</sup> From the fact that hallucinatory and genuinely perceptual experiences are subjectively indistinguishable, it does not follow that they are type-identical experiences. Hallucinatory and genuinely perceptual experiences can be phenomenally, qualitatively or subjectively the same without having to be intrinsically the same, and so without having to share a common experience-type. The subjective indistinguishability of hallucinatory and genuinely perceptual experiences is compatible with hallucination and genuine perception being type-distinct experiences.

Some philosophers of perception resist the common element thesis by questioning the subjective indistinguishability of hallucinatory and genuinely perceptual experiences. Austin criticizes philosophers who assume that hallucinatory and genuinely perceptual experiences must be indistinguishable if we fail to distinguish between them.<sup>8</sup> He argues that a failure to distinguish does not entail indistinguishability. Austin does not reject the possibility of hallucinatory and genuinely perceptual experiences which are "qualitatively indistinguishable." He merely denies that we must postulate cases of qualitative indistinguishability, "even qualitative *identity*,"<sup>9</sup> in order to account for the possibility of failing to distinguish between hallucinatory and genuinely perceptual experiences. Anticipating Austin by thirty-four years, Russell rejects the premise of the argument from hallucination that we cannot, at the time of the experience, subjectively or introspectively distinguish between hallucinatory and genuinely perceptual experiences, between, say, imagination and sensation. He speaks of "a difference, usually recognizable introspectively, between the relation of imagining and the relation of sensation."<sup>10</sup> This alleged difference consists in the fact that objects of imagination are not, or at least need not, be given as simultaneous with the subject.

Unlike Austin and Russell, I am prepared to grant for the sake of argument that hallucinatory and genuinely perceptual experiences can be the same phenomenally or qualitatively, and thus be subjectively indistinguishable. I allow that at least some hallucinatory experiences can fail to be distinguished from genuinely perceptual experiences because the experiences are introspectively indistinguishable from one another. But what follows from the fact that hallucinatory and genuinely perceptual experiences can be subjectively indistinguishable? I argue that the introspective indistinguishability of hallucinatory and genuinely perceptual experiences is consistent with hallucinations and genuine perceptions being type-distinct experiences.

The causal theory of perception is committed to the common element thesis in maintaining that there is a single state of affairs common to all cases of its looking to S as if F, and thus a common experiential component in hallucination and genuine perception.<sup>11</sup> Causal theorists about perception are common element theorists in holding that hallucinations and genuine perceptions share common experience-types which, when caused by appropriate external physical objects, qualify as genuine perceptions. For causal theorists, hallucinations are genuinely perceptual experiences which happen not to be caused in an appropriate manner by external physical objects. Since hallucinatory and genuinely perceptual experiences are distinguished solely in terms of their extrinsic causal relations, they are intrinsically the same experience. In



identifying hallucinatory and genuinely perceptual experiences, the causal theorist is committed to the common element thesis.

As common element theorists, causal theorists about perception, like Hirst, Armstrong, Searle, Pears and Robinson, insist that hallucinations and genuine perceptions involve type-identical experiences. Disjunctivists about experience, such as Hinton, Snowdon and McDowell, maintain that hallucinations and genuine perceptions involve type-distinct experiences, and thus altogether different experiences. The causal theory of perception is *internalist* about perceptual experiences and content, holding that perceptual experiences and content are wholly self-contained and immune to the shortcomings of the external physical world, but *externalist* about perception itself, insisting that extrinsic causal/contextual relations determine whether a perceptual experience qualifies as a perception. Perceptual experience of an X which is F is not *itself* a causal relation to an X which is F, but instead *requires* a causal relation to an X which is F in order to qualify as a perception. For disjunctivists about experience, perceptual experience of an X which is F *just* is a causal relation to an X which is F, and so does not require an extrinsic causal relation to an X which is F in order to qualify as a perception.

Hirst commits himself to a version of the causal theory of perception when he states that "perceiving consists of perceptual consciousness plus a causal relation."<sup>12</sup> He speaks of "perceptual consciousness (the activity which when caused by a corresponding external object amounts to perception)."<sup>13</sup> Perceptual consciousness in perception is caused by appropriate external physical objects, while perceptual consciousness in hallucination has no external physical cause, but is instead the product of spontaneous brain activity or direct cortical stimulation. Stainsby is a causal theorist about perception in maintaining that "the experience of seeing a physical object...is independent of the actual presence of such an object. Where the mechanism producing such an experience is activated by a corresponding, external, physical object, we say that that object is being seen."<sup>14</sup> Hallucination is the experience of seeing in the absence of an appropriate, external physical object.

Hirst commits himself to the common element thesis when he insists that "the same consciousness of a tree might occur when some other object, or none at all, was causing it."<sup>15</sup> Searle analogously claims that "In the case of visual hallucination the perceiver has the same visual experience but no Intentional object is present."<sup>16</sup> He argues that "I might be having just this experience and all the same it might not be

caused by its Intentional object; it might be, as they say, a hallucination."<sup>17</sup> In a similar vein, Unger speaks of a man who has never eaten vanilla ice cream but is "so stimulated as to have the same (kind of) immediate experience as a man who ate some ice cream of that kind."<sup>18</sup>

While most causal theorists regard hallucination as perceptual experience or perceptual consciousness in the absence of appropriate, external physical objects, Armstrong and Searle claim that hallucination is perception in the absence of appropriate, external physical objects. Armstrong states that we "might have had exactly the same perceptions"<sup>19</sup> in the absence of relevant, external physical objects. On Armstrong's analysis, hallucinations "must be treated as a species of perception"<sup>20</sup> because, even when we realize that we are merely hallucinating, we *would* believe that we are perceiving but for our independent contrary beliefs. Hallucinations are simply "centrally aroused" perceptions. Searle analogously argues that, "if I take away the bike, I am left with a perception that has no object, for example, a hallucination."<sup>21</sup> Armstrong and Searle are thus committed to a more radical version of the common element thesis than Hirst, Stainsby and Unger, one which holds that hallucinations are perceptions, and not merely perceptual experiences or perceptual consciousness, in the absence of appropriate causal/contextual relations to external physical objects.

Philosophers attempt to account for the phenomenal, qualitative or subjective similarity between hallucinatory and genuinely perceptual experiences in terms of common processing or activity in the brain. Hirst, for instance, believes that mental imagery in hallucination is "subjectively similar to perceiving" because "there is activity in the nervous system similar to that in genuine perceiving."<sup>22</sup> The subjective indistinguishability of imagining and perceiving is explained by the fact that the brain or nervous activity in mental imagery "is similar in nature or location to that which occurs in perception."<sup>23</sup> Hallucinations result when "Somewhat similar brain activity and so somewhat similar experiencing" occurs "without an external object as cause."<sup>24</sup> Notice that Hirst claims only that there is *similar*, not type-identical, nervous or brain activity. Hallucinations and genuine perceptions are only subjectively similar, not type-identical, experiences because they involve only similar, not type-identical, brain or nervous activity. The brain activity involved in hallucination need not be identical to the brain activity involved in genuine perception merely to account for the subjective similarity between the experiences. Hallucinatory and genuinely perceptual experiences can seem alike introspectively because the brain activity upon which hallucinations depend is similar to the brain activity upon which genuine perceptions depend. Nothing need be

identical or precisely the same in order to account for the subjective similarity: things need only be similar.

In his earlier work, Hirst is careful not to commit himself to the common element thesis. He speaks only of *similar* brain or nervous activity and *similar* experiencing in hallucination and genuine perception. But in his later work, Hirst insists that hallucinatory and genuinely perceptual consciousness are precisely the same consciousness, being inner aspects of precisely the same brain activity. Regarding hallucinations as imagery, Hirst claims that, in mental imagery, "brain activity which occurs in corresponding perceptions is reactivated as the result of internal causes."<sup>25</sup> Since his dual-aspect theory of perception identifies perceptual experiences with events in the brain, and since he believes that precisely the same brain activity is involved in hallucination and genuine perception, Hirst concludes that hallucinatory and genuinely perceptual experiences are type-identical experiences with wholly subjectively generated content.

## 2.2 The Causal Theory, The Common Element, and Internally Generated Content

Like most causal theorists about perception, Pears maintains that we cannot perceive external physical objects *by having* perceptual experiences unless those objects cause inner perceptual experiences.<sup>26</sup> By "inner perceptual experiences," Pears and other causal theorists mean perceptual experiences whose intrinsic nature is independent of the percipient's physical environment, and whose occurrence therefore does not depend upon the occurrence of events in the external physical world. Pears argues that the statement "S saw X by having a visual experience E" entails that X caused E *in* S since, if X did not cause E *in* S, then S could not have seen X *by having* E. To support his argument, he appeals to the case of a traveler in the desert who, with eyes closed, has an hallucinatory experience *as of* an oasis before him which exactly matches an actual oasis before him. The traveler cannot see the oasis since the exact match between his hallucinatory experience and the oasis before him is entirely coincidental. Wiggins similarly argues that

To make a correct and adequate report of what is in front of me, and do so on the strength of what I seem to see, is not in itself a sufficient condition of seeing what is before me....For there to be *perception* of it, the scene I report must itself figure in the explanation and causal ancestry of my visual state.<sup>27</sup>

Pears insists that his oasis example shows that S does not see X if S's experience E is not caused by X. Since he believes that S cannot see X *by having* visual experience E unless X causes visual experience E in S, Pears believes that S does not see X unless X causes an *inner* visual experience. But Pears's oasis example equally shows that S does not see X if S is not caused to *have* visual experience E. Certainly, nothing in Pears's oasis example establishes the causal theorist's principles: (1) that X must cause a visual experience, as opposed to causing the *having* of a visual experience; (2) that X must cause a visual experience *in* S, an *inner* visual experience; or (3) that the only thing which distinguishes hallucinations from genuine perceptions is the fact that the correlations in hallucinations are entirely coincidental because they do not result from causal interactions between the experiences and the external physical world.

Pears's oasis example shows only that, in order for S to see X, X must cause S to *have* a visual experience E, and S must see X *by having* visual experience E, that is, by X itself looking or appearing some way to S. But from the fact that S sees X in virtue of X's causing the having of visual experience E by S, it does not follow that X causes visual experience E *in* S. Contrary to what Pears maintains, one can accept that S sees X by being caused by X to have a visual experience E, while rejecting the notion that X must cause a visual experience E *in* S. I agree with the causal theory of perception that we perceive external physical objects *by having* perceptual experiences, but I disagree with the causal theory that these experiences are *inner* happenings or events which are caused by external physical objects.

Pears and other causal theorists rightly insist that S cannot see X if X has no effect upon S. But X's effect upon S need not be the production of a visual experience *in* S. Pears's causal theorist requirement that the visual experience be *in* the percipient is entirely unmotivated by the notion that we see external physical objects by having visual experiences. The inner experience account is motivated, instead, by the mistaken belief that science shows that perceptual experiences are produced at the very end of a causal chain leading from the object perceived to the percipient, and are therefore inner events which are wholly independent of external physical objects. Nothing in Pears's notion that we see external physical objects by having visual experiences supports the view that hallucinations and genuine perceptions have a common world-independent experience, that hallucinatory and genuinely perceptual experiences are type-identical experiences. The common element thesis is motivated, not by the idea that we perceive things by having perceptual experiences of them, but rather by the notion that



perceptual experiences are wholly internal end-products of brain activity which, in the case of perception, originates in external physical objects.

The causal theorist maintains that, in order for external physical objects to be causally responsible for our perceptual experiences, they must cause those perceptual experiences by setting in motion a chain of causal events leading from external physical objects to the percipient's brain, where it is alleged that the perceptual experiences are ultimately produced. Russell argues that "Whoever accepts the causal theory of perception is compelled to conclude that percepts are in our heads, for they come at the end of a causal chain of physical events leading, spatially, from the object to the brain of the percipient."<sup>28</sup> Lockwood points out that a consequence of locating perceptual experiences within the percipient's own head is that "we are not quite as closely in touch with the external world as common sense and its philosophical champions would have us believe."<sup>29</sup> The causal theorist's belief that perceptual experiences are located in the head thus threatens the common-sense realist's notion of a direct contact or confrontation with external physical objects.

Since effects must be located where they are caused or produced, causal theorists reason that perceptual experiences must be located in the head with their immediate or proximate neural causes. But if perceptual experiences are located in the head, then their internal objects must also be located in the head. Ryle explains that a "natural but mistaken assumption" in the argument from physiology to the conclusion that all we can ever perceive are "things or happenings inside us" is the assumption that perceiving is a bodily and/or psychological state or process,<sup>30</sup> a physiological or psychological *end-stage* of causal processes. Common-sense realists need not question the scientific accounts of the causal mechanisms and processes involved in perception. They need only doubt that perceiving comes at the very end of the causal chain.

Since it is possible to hallucinate an X when there actually is an X there before us, the causal theorist reasons that the actual presence of an X is insufficient for distinguishing between hallucinating an X and genuinely perceiving an X. The causal theorist concludes that, in order genuinely to perceive an X, there must actually be an X there before us, and that X must be appropriately causally responsible for our experience. Believing that perceptual experiences come at the very end of a causal chain leading from the object perceived to the percipient, the causal theorist reasons that we perceive an X only when an internal and locally supervenient perceptual experience is appropriately caused by an X. Assuming that both hallucinatory and genuinely

perceptual experiences are produced by activity in the brain, the causal theorist concludes that since hallucinatory content is wholly subjectively contributed, genuinely perceptual content must similarly be wholly subjectively contributed, and cannot therefore be identified with intrinsic properties of external physical objects.

The argument from physiology maintains that perception is a wholly self-contained experience which can be triggered in the absence of appropriate, external physical objects by activation of a physiological mechanism in the percipient. But if perception can occur in the absence of appropriate, external physical objects, then the object of perception must also be wholly self-contained, and cannot therefore be identified with external physical objects. Hirst argues that "it is theoretically possible that if the same kind of brain activity were to be caused in some other way, an experience indistinguishable from perception would occur without any external object."<sup>31</sup> But from the fact that spontaneous or artificially induced brain activity can produce an experience indistinguishable from a genuinely perceptual experience in the absence of any appropriate, external physical objects, it does not follow that spontaneous or artificially induced brain activity can produce a genuinely perceptual experience in the absence of any appropriate, external physical objects. The fact that artificial stimulation of brain activity involved in perception can produce an experience indistinguishable from a genuinely perceptual experience does not entail that it can produce the very same experience which occurs in perception. Subjective indistinguishability does not entail type-identity. What warrant is there for concluding that we have produced, not simply a subjectively indistinguishable experience, but also a type-identical experience?

The causal theory of perception maintains that perceptual experiences come at the very end of causal chains leading from external physical objects to percipients, and are thus events *in* percipients. Since it is assumed that genuinely perceptual experiences can be triggered artificially, either spontaneously or by direct cortical stimulation, the occurrence of genuinely perceptual experiences is held to be independent of the occurrence of events in the external physical world. Believing that the objects of perceptual experience are internal to the experiences themselves, causal theorists conclude that the objects of perceptual experience are similarly independent of the occurrence of events in the external physical world, and are thus internally generated by activity in the brain.

Robinson defends the causal theory of perception by arguing that, since it is a necessary truth that there cannot be an experience without an object, since acts of

awareness must invariably possess an internal object, brain stimulation which produces the act of awareness must also produce its object.<sup>32</sup> Like the act of hallucinatory awareness itself, any object of hallucination would have to be generated internally by activity in the brain. Since causal theorists are committed to the common element thesis, and thus regard hallucinatory and genuinely perceptual experiences as type-identical experiences, with hallucinations and genuine perceptions distinguished solely by the causal ancestry of the type-identical experiences, any object of perception would similarly have to be generated wholly internally by activity in the brain.

In his defense of the causal theory, Robinson oddly construes his naive or direct realist opponent as a *purist* about experiential content. He interprets naive or direct realism as the view that normal perceptual content has absolutely no subjective contribution whatsoever. Naive or direct realism could therefore be refuted if it could be shown that there is at least some subjective experiential content in normal perception, at least some content which cannot be identified with features of the external physical world. Since Robinson believes that perceptual illusions show that at least some experiential content is subjectively contributed, he concludes that naive or direct realism is false. But contrary to what Robinson suggests, the direct realist need not deny that there are subjective contributions to experiential content. Robinson's arguments against a *purist* direct realist about experiential content do not undermine a *pragmatic* direct realist about experiential content who holds that genuinely perceptual content essentially has determinants in the external physical world, but also frequently has some subjective internal contributions.

If anyone is committed to being a *purist* about experiential content, it is surely the causal theorist, rather than the direct realist. To capture the causal theorist's notion that hallucination and genuine perception share a common non-world-involving experience, an experience which constitutes hallucination when it is triggered wholly internally by spontaneous or artificially induced brain activity, but constitutes perception when it is triggered externally by an appropriate, external physical object, the causal theorist must be construed as arguing, not simply that *some* perceptual content is subjectively contributed, that *some* aspects of perceptual experiences are separate effects of external physical objects which are induced *in us*, but rather that *all* perceptual content is subjectively contributed, that perceptual experiences are *wholly* separate effects induced *in us*, and are thus entirely independent of external physical objects and their properties. If the experiential content in hallucination is wholly subjectively contributed, and if hallucinatory and genuinely perceptual experiences are distinguished

only extrinsically by their causal ancestry, and are thus intrinsically the same experience, then the experiential content in genuinely perceptual experience must analogously be wholly subjectively contributed.

Direct realists can be *pragmatists* about experiential content and allow that perceptual content is a *hybrid* of external and internal determinants. Direct realism's notion that we directly confront the external physical world in perception need not be construed as the view that we directly confront *only* the external physical world in perception. But in order to capture the causal theorist's notion that hallucinations and genuine perceptions are distinguished solely by the causal ancestry of their common non-world-involving experiences, that one and the same experience-type constitutes either hallucination or genuine perception depending upon the way that it is caused, causal theorists cannot allow that experiential content is a hybrid of internal and external determinants. It is therefore the causal theorist, rather than the direct realist, who is committed to being a purist about experiential content, and consequently the causal theory of perception which is refuted by evidence of external contributions to experiential content, rather than direct realism which is refuted by evidence of internal contributions to experiential content.

### 2.3 The Causal Theory of Perception and the Disjunctive Analysis of Experience

The causal theory of perception maintains that we perceive external physical objects by having perceptual experiences caused *in us* by the action of those objects on our sense organs. We perceive external physical objects, not simply when we have matching perceptual experiences, but when the matching perceptual experiences *in us* are caused in an appropriate manner by external physical objects. The causal theory of perception insists that looks-statements are made true, when they are true, by just one sort of internal state of affairs which is independent of causal/contextual relations to the subject's physical environment. Whether this one sort of state of affairs constitutes hallucinating or genuinely perceiving depends upon whether it is appropriately caused from without.

Disjunctivists about experience reject the causal theorist's notion that hallucinating and perceiving share a common experience of seeming to perceive which, when appropriately caused from without, constitutes perceiving. They deny that perceptions are perceptual experiences plus appropriate causal/contextual relations to external physical objects, and thus deny that hallucinations and genuine perceptions are



distinguished only extrinsically in terms of causal/contextual relations. Disjunctivists about experience hold that genuinely perceptual experiences, unlike hallucinatory experiences, are dependent for their occurrence and nature upon the occurrence and nature of events in the external physical world. The identity of what we perceive contributes to individuate our perceptual experiences, and thus enters into the proper specification of the content of our perceptual experiences. Since hallucinations, unlike genuine perceptions, are both wholly internal to and locally supervenient upon the subject, hallucinatory and genuinely perceptual experiences are radically different experience-types.

Disjunctivists deny any common experiential element in hallucination and genuine perception other than the phenomenal, qualitative or subjective character of the experiences. Even when hallucinatory and genuinely perceptual experiences are subjectively indistinguishable, hallucinating and genuinely perceiving remain fundamentally different experience-types, with radically different things making these experiences the experiences they happen to be. As Goldman notes, the fact that hallucinatory and genuinely perceptual experiences "can be phenomenologically indistinguishable at the time they occur...does not prevent us from holding them ontologically distinct."<sup>33</sup> The disjunctivist insists that phenomenally, qualitatively or subjectively indistinguishable experiences can nonetheless be intrinsically different experiences.

The central idea behind the disjunctive analysis of experience is that hallucinatory and genuinely perceptual experiences are fundamentally distinct experience-types, and must therefore be given different analyses with respect to experiential content and objects. The reason why we do not perceive external physical objects in problems cases like Pears's oasis example is, not because our perceptual experiences are inappropriately caused from without, but rather because we do not have the right kind of experience in the first place, we do not have genuinely perceptual experiences. Problem cases like Pears's oasis example involve mere experiences as of external physical objects, not genuine but inappropriately caused experiences of those objects. Genuinely perceptual experience, as Ziedins rightly insists, is "an awareness of some aspects of one's physical environment, not just an inner sensation which has some outer cause."<sup>34</sup>

The disjunctive analysis of experience need not insist that hallucinations and genuine perceptions have absolutely nothing in common, and so need not deny that

hallucinations and genuine perceptions share a common phenomenal, qualitative or subjective character. The disjunctive analysis of experience denies only that hallucination and genuine perception are intrinsically the same experience, and thus type-identical experiences. If we are not misled by the subjective indistinguishability of hallucinatory and genuinely perceptual experiences into concluding that they are the very same experience, then we are not compelled to allow for the occurrence of perceptual experiences in the absence of appropriate, external physical objects, and so are not driven to distinguish perceiving from perceptual experience. Experiences which occur in the absence of appropriate, external physical objects are not genuinely perceptual experiences.

Disjunctivists about experience maintain that looks-statements have disjunctive fulfillment conditions. The looks-statement "It looks to S as if F" is made true, when it is true, by two distinct states of affairs. Unlike genuinely perceptual situations, there is no object seen which looks F in hallucinatory situations. In hallucinatory situations, nothing need be F-looking. The fact that both an hallucinator of an oasis and a genuine percipient of an oasis would have experiences specifiable by the statement "It looks to S as if there is an oasis there" does not entail that the statement is made true by exactly the same state of affairs in hallucinatory and genuinely perceptual situations.

Hinton is a disjunctivist about experience because he denies that perception and its perfect illusion are "the very same experience,"<sup>35</sup> and thus "something of the same category."<sup>36</sup> Rejecting the intuitively plausible principle "Same proximate cause, same immediate effect,"<sup>37</sup> Hinton maintains that one and the same proximate neural cause can produce either an hallucinatory experience or a genuinely perceptual experience depending upon the way that the proximate neural cause is itself brought about. When the proximate neural cause is spontaneous or artificially induced by direct cortical stimulation, an hallucinatory experience results. But when the proximate neural cause is brought about by an appropriate item in the external physical world, a genuinely perceptual experience results. Despite having the same proximate neural cause, hallucinatory and genuinely perceptual experiences remain distinct experience-types because the experiences have different distal causes resulting in a difference in the way that the proximate neural cause is brought about. Since hallucinations and genuine perceptions involve type-distinct experiences, they need not be given the same analysis with respect to experiential content and objects. Hinton effectively argues that it is distal, rather than proximal, causes which are relevant to the determination of perceptual content and objects.

## 2.4 Disjunctivism and the Causal Argument Against Direct Realism

The causal argument against direct realism, or the argument from physiology, maintains that the perception of external physical objects involves a causal chain of events leading from external physical objects through the sense organs to the percipient's brain, where perceptual experiences are finally produced. Since it is then brain activity, rather than events in the external physical world, which is immediately causally relevant to the production of perceptual experiences, genuinely perceptual experiences can occur in the absence of external physical objects if the appropriate brain activity occurs spontaneously or is artificially stimulated. The causal argument against direct realism then insists that perceptual experiences, being wholly internally generated by brain activity, must take objects which are themselves wholly internally generated by brain activity, and cannot therefore involve direct contact or confrontation with external physical objects.

The causal argument against direct realism holds that the causal processes involved in perception show that external physical objects are inessential to the occurrence of perceptual experiences. All that matters is the pattern of stimuli impinging on the sense organs. It is claimed that we can produce genuinely perceptual experiences in the absence of appropriate, external physical objects simply by reproducing the pattern of stimulation at the sense organs normally caused by external physical objects. Since genuinely perceptual experiences can be produced in the absence of appropriate, external physical objects, those perceptual experiences which happen to be produced by external physical objects must then be separate and distinct end-effects produced in percipients as a result of a causal chain leading from external physical objects to the percipients. Hallucinations and genuine perceptions must therefore share a common non-world-involving experience.

Claiming that the direct objects of vision are always private patterns of neural activity in the visual cortex, and thus advocating representationalism, Lowe argues that, as long as the "light input and consequent pattern of retinal activity" are kept the same, a subject would "enjoy the same visual experience, whether or not the external objects he sees remain there."<sup>38</sup> As an externalist disjunctivist, I deny that the subject could have precisely the same visual experience in the absence of the external objects. The fact that a subject can be caused to have an experience phenomenally, qualitatively or subjectively indistinguishable from a genuinely visual experience simply by reproducing

the pattern of retinal activity which occurs when genuinely perceiving does not entail that the subject can be caused to have a genuinely visual experience in the absence of external objects. Spontaneous or artificially induced activity in the retinal surfaces which produces experiences that both correspond to states of affairs in the external world and are subjectively indistinguishable from genuinely visual experiences is insufficient for genuinely seeing external objects. Mere correspondence and subjective indistinguishability are insufficient for an identity of experiences.

Like Hirst, Robinson regards the causal argument against direct realism as the most formidable challenge facing the direct realist's notion of a direct contact or confrontation with external physical objects. Robinson insists that the causal argument against direct realism would be vindicated, and the objects of genuinely perceptual experience shown to be internally generated by the brain, if we could demonstrate that what is true of hallucination is also true of genuine perception.<sup>39</sup> He reasons that, since acts of awareness must invariably possess an internal object, any brain stimulation which produces an act of hallucinatory awareness must also produce its object. If what is true of hallucination is also true of genuine perception, then any brain stimulation which produces an act of genuinely perceptual awareness must also produce its object. If hallucinations have objects which are internally generated by the brain, and if hallucinations and genuine perceptions have the same proximate neural cause, and must therefore be given the same analysis, then both hallucinatory and genuinely perceptual experiences must take objects which are internally generated by the brain, and direct realism must be false. Armstrong similarly argues that, "if it is admitted that in auditory hallucination the immediate object of perception is an auditory sense-impression, and if it is admitted that the very same experience could be a veridical perception, it can hardly be denied that even in veridical perception the *immediate* object of perception is a sense-impression."<sup>40</sup>

In order to establish the generalization that what is true of hallucination is also true of genuine perception, and that both experiences therefore take internally generated objects, Robinson argues that we require the truth of two propositions: (1) that it is theoretically possible by direct cortical stimulation of brain processes involved in perception to cause an hallucination which exactly resembles perception in its subjective character; and (2) that we must give the same account of hallucinatory and genuinely perceptual experiences "*when they have the same neural cause*,"<sup>41</sup> and that we cannot plausibly say that hallucinatory experiences take mental images or sense-data as their objects while genuinely perceptual experiences do not when they have the same

proximate neural cause. Together, these propositions entail that "some subjective experiential content--that is some object of awareness which cannot be identified with any feature of the external world"<sup>42</sup> is generated by perceptual processes in the brain. Since he characterizes direct realism as the view that "features of the external world constitute the only objects or contents of experience"<sup>43</sup> in "ordinary perception," that there can be absolutely no subjective contribution to genuinely perceptual content, Robinson concludes that the truth of the two propositions together entails the falsehood of direct realism, and that we are therefore committed to a "veil of perception" between us and the external mind-independent world.

The first proposition required to vindicate the causal argument against direct realism asserts that it is theoretically possible to produce hallucinations which precisely resemble genuine perceptions in their subjective character by artificially stimulating brain processes involved in perception. Correctly regarding the first proposition as uncontroversial, Robinson proceeds to defend the second proposition by attacking the disjunctive analyses of experience offered by Hinton, Snowdon and McDowell. He complains that disjunctivists about experience are committed to the implausible view that one and the same brain process may or may not produce an object of awareness, depending upon the way that the brain process is produced. When the brain process is produced artificially, as in the case of hallucination, the brain process produces both an act of awareness and an internal object of that awareness. But when the brain process is produced normally by the action of external physical objects on the sense organs, the brain process produces only an act of awareness, and not its object.

Robinson rightly criticizes the view that one and the same brain process can produce either an experience with a wholly internally generated object or an experience with an external physical object depending upon the way that the brain process is brought about. His criticisms are directed against disjunctivist analyses of experience which hold that hallucination and genuine perception have the same proximate neural cause but different immediate effects. Against disjunctivist analyses of experience, Robinson believes that hallucination, illusion and genuine perception all share a common inner experience which has internally generated objects. He thus argues against externalist accounts of perceptual content.<sup>44</sup>

Foster claims that, by electrically stimulating the optic nerves, it is possible to produce "a visual experience of exactly the same intrinsic kind"<sup>45</sup> as genuinely perceptual experiences. He considers, but then rejects, "a distinction between the



*subjective* character of an experience and its *intrinsic* character."<sup>46</sup> He believes that a distinction between the subjective and the intrinsic character of experiences is both dubious and entails an unacceptable account of the causation of experiences. For we are then compelled to say that "the very same type of brain-process" causes experiences of different intrinsic types when caused in different ways. Like Robinson, Foster rejects the notion that one and the same proximate neural cause can produce either an hallucinatory experience or a genuinely perceptual experience, depending upon the way that the proximate neural cause is itself brought about.

Disjunctivists about experience grant the spirit of Robinson's first proposition in support of the causal argument against direct realism. Hinton explicitly allows that hallucinatory and genuinely perceptual experiences can be the same phenomenally, qualitatively or subjectively. Few if any disjunctivists would dispute the theoretical possibility of inducing by direct stimulation of the optic nerve experiences which exactly resemble genuinely visual experiences in their subjective character. Since Hinton and other disjunctivists concede the spirit of Robinson's first proposition in support of the causal argument against direct realism, they generally resist the causal argument by disputing Robinson's second proposition, that if hallucinatory and genuinely perceptual experiences have the same neural cause, then they must be given the same analysis.

Disjunctivists about experience insist that the fact that hallucinatory and genuinely perceptual experiences have the same proximate neural cause does not entail that they must be given the same analysis, and so does not entail that they must take the same subjective content and objects. They implausibly deny that experiences which have the same proximate neural cause must be given the same analysis because they mistakenly believe, along with proponents of the causal argument against direct realism, that the scientific evidence shows that hallucinatory and genuinely perceptual experiences share a common, proximate neural cause. Falsely believing that hallucinatory and genuinely perceptual experiences have the same proximate neural cause, but correctly maintaining that hallucinatory and genuinely perceptual experiences are fundamentally different experience-types, disjunctivists about experience are compelled to deny that experiences with the same neural cause must be given the same analysis.

But the causal argument against direct realism can be resisted without implausibly denying that experiences which have the same proximate neural cause must be given the same analysis. Robinson's second proposition asserts only that



hallucinatory and genuinely perceptual experiences must be given the same analysis *when they have the same neural cause*. Since recent scientific evidence shows that hallucinatory and genuinely perceptual experiences do not, in fact, have the same proximate neural cause, we can fully accept Robinson's second proposition in support of the causal argument against direct realism without having to accept that hallucinatory and genuinely perceptual experiences must be given the same analysis, and so without having to accept that hallucinatory and genuinely perceptual experiences are type-identical experiences. Robinson's second proposition in support of the causal argument against direct realism does not count against direct realism since hallucinatory and genuinely perceptual experiences do not, in fact, have the same proximate neural cause.

Direct realists can fully accept both the principle contained in Robinson's second proposition, "Same proximate cause, same immediate effect," and the second proposition itself, that hallucinatory and genuinely perceptual experiences must be given the same analysis *when they have the same proximate neural cause*. Since hallucinatory and genuinely perceptual experiences do not, in fact, have the same proximate neural cause, we are not compelled to give hallucinatory and genuinely perceptual experiences the same analysis, and are thus not compelled to reject direct realism. Since hallucinatory and genuinely perceptual experiences have different proximate neural causes, the causal argument against direct realism has not been vindicated, and the objects of genuinely perceptual experience have not been shown to be internally generated by the brain.

Robinson's causal argument against direct realism maintains that, if direct cortical stimulation of brain processes involved in genuine perception can produce hallucinatory experiences which exactly resemble genuinely perceptual experiences in subjective character, and if hallucinatory and genuinely perceptual experiences have the same proximate neural cause, and so require the same analysis, then perceptual processing in the brain produces an object of awareness which cannot be identified with any feature of the external physical world, and direct realism is false. But since the second premise of Robinson's argument is false, since hallucinatory and genuinely perceptual experiences do not, in fact, have the same proximate neural cause, and so do not require the same analysis, the causal argument against direct realism has not been vindicated, and the direct realist's notion of a direct contact or confrontation with external physical objects has not been refuted. Since Robinson does not offer any other arguments for giving hallucinatory and genuinely perceptual experiences the same

analysis, we can conclude with the disjunctivist that hallucination and perception involve fundamentally different experience-types, and so need not take the same objects.

Unlike other disjunctivists about experience, I accept both of the propositions which Robinson offers in support of the causal argument against direct realism. For acceptance of Robinson's two propositions does not, after all, preclude the direct realist's notion of a direct contact or confrontation with external physical objects. I accept, firstly, that it is theoretically possible to induce hallucinatory experiences which exactly resemble genuinely perceptual experiences in subjective character by artificially stimulating brain processes involved in perception. But I deny that subjective character exhausts the intrinsic nature of experiences, and so deny that subjectively indistinguishable experiences must be intrinsically the same experience, and thus type-identical experiences. From the fact that we can artificially activate a brain process involved in perception, thereby generating an experience which exactly resembles a genuinely perceptual experience in its subjective character, it does not follow that we can generate a genuinely perceptual experience.

I accept, secondly, that hallucinatory and genuinely perceptual experiences must be given the same account, and thus attributed the same kind of internally generated content or object, when they have the same proximate neural cause. But since recent neuropsychological and neurophysiological evidence indicates that hallucinatory and genuinely perceptual experiences have altogether different proximate neural causes, the causal argument against direct realism is not vindicated by acceptance of the second proposition, and the content or objects of genuinely perceptual experience are not shown to be internally generated by the brain.

Robinson's target is disjunctivism about experience which holds that hallucinations and genuine perceptions have the same immediate cause in the brain. For Hinton and other disjunctivists, the character of the remote stimulus determines whether one and the same brain process results in perception or its perfect illusion. Since I deny that hallucinatory and genuinely perceptual experiences have the same proximate neural cause, I do not implausibly hold that one and the same brain process results in either subjective or objective experiential content, with either internally or externally generated objects, depending upon the way that the proximate neural cause is itself brought about. Since hallucination and genuine perception involve different brain processes, we need not insist that one and the same proximate neural cause can result in altogether different experience-types. Unlike other disjunctivists, I do not hold

that one and the same brain process results in experiences of mental images of external physical objects when induced artificially, but results in experiences of external physical objects themselves when induced by those objects via the sense organs. I believe that the neuropsychological and neurophysiological evidence from cognitive science shows that altogether different brain processes are involved in hallucination and perception, not one and the same brain process which has different effects depending upon the way that the brain process is brought about.

As a disjunctivist about experience, I reject the causal theorist's notion that hallucinating and genuinely perceiving share a common experience of seeming to perceive which, when appropriately caused from without, constitutes perceiving. Like Hinton's disjunctivism, my disjunctive analysis of experience holds that hallucinatory and genuinely perceptual experiences can be phenomenally, qualitatively or subjectively the same while remaining type-distinct experiences. I accept Hinton's qualified claim that hallucination and genuine perception are the same experience, but that this only means that they are the same phenomenally, qualitatively or subjectively. Looks-statements in hallucination and genuine perception are made true, when they are true, by the obtaining of altogether different states of affairs. I maintain a transitive, act/object analysis of genuinely perceptual experience but an intransitive, merely adverbial, analysis of after-images and hallucinatory experience. The proposed non-epistemic, non-propositional and non-intentional disjunctivism about experience differs significantly from Snowdon's disjunctivism since I avoid the obvious epistemic implications of construing perception in terms of a relation which enables demonstrative thought contact<sup>47</sup> and resist construing the looks-states in genuine perception in terms of looking *to be* the case. As a non-epistemic theorist, I reject the notion that, in order for S to see X, X must look to S *to be* some way.<sup>48</sup>

Hirst points out that common sense rejects the basic assumption of both the argument from hallucination and the sense-datum theory that "the mode of consciousness and objects of awareness are of exactly the same type in hallucination and perception."<sup>49</sup> Common-sense realists are committed to the view that hallucinations and genuine perceptions are type-distinct experiences or modes of consciousness. Any defense of the common-sense notion of a direct contact or confrontation with external physical reality must show that hallucinations and genuine perceptions are type-distinct experiences, and thus not the very same experience requiring the very same analysis for its content or objects.

## 2.5 Snowdon's Argument Against the Causal Theory of Perception

Snowdon presents an argument against the causal theory of vision which is based upon the premise that, in everyday cases of perceiving, perceptual experience is entirely transparent.<sup>50</sup> He argues that, in normal, standard cases of perceiving, there is nothing in the perceptual occurrence which is both manifest to us and qualifies as a separate effect induced in us by the object perceived. The traditional way of making this point is to argue that perceptual experience is wholly transparent or diaphanous, revealing only the existence and nature of its objects. Since the premise of Snowdon's argument is false, since perceptual experience is not wholly transparent or diaphanous, his argument against the causal theory of vision is ultimately unsuccessful.

Snowdon is simply mistaken when he claims that it is "quite impossible" in normal, standard cases of perceiving to direct one's attention onto anything other than the object perceived, and so "there is nothing manifest in perception which can count as the effect of the perceived object."<sup>51</sup> Contrary to what Snowdon suggests, we can perceptually attend to an object's mode of presentation in perceptual experience, and not just attend to the object which is perceptually presented. Perceptual experiences have various introspectible properties which cannot plausibly be identified with properties of the objects perceived. Snowdon is therefore mistaken when he argues that "in perception there is nothing to latch on to other than the world; in particular, there is no such thing as a state produced in us, and which is manifestly distinct from the world, to which we can attend."<sup>52</sup> To the extent that we can attend in perceptual experience to properties which are not identifiable with properties of perceived objects, perceptual experience is not wholly transparent or diaphanous. Phenomena like Benham's colours, the double presentations of binocular vision and the unequal look of the Müller-Lyer figure qualify as introspectible effects produced in us which cannot plausibly be identified with intrinsic properties of the external physical objects which are perceived. Because Snowdon's first premise in his argument against the causal theory of vision is false, his argument as a whole fails.

Since perceptual experience is not wholly transparent or diaphanous, we cannot ground the case against the causal theorist's assumption of a non-world-involving experience common to hallucination and genuine perception on an alleged inability in perception to latch onto anything other than the perceptual object and its properties. Snowdon's appeal to the introspective phenomenology of perceiving ultimately fails to resist the causal theorist's common element thesis. We must appeal, instead, to

scientific data in order to resist the causal theorist's assumption that hallucinatory and genuinely perceptual experiences are type-identical experiences. Robinson himself concedes that science alone can show whether precisely the same process which "produces a veridical perception would, if artificially stimulated, produce a veridical-seeming hallucination."<sup>53</sup> Only scientific evidence can decide between the causal theorist's supposition of a non-world-involving experience common to hallucination and genuine perception and the disjunctivist's view that hallucination and genuine perception involve radically different experience-types. I believe that recent scientific evidence favours the disjunctivist over the causal theorist.

Burge explains that "a very common argument for individualism....begins by noting that we could have the same perceptual experiences, same perceptual representations, whether these were veridical perceptions, misperceptions, or hallucinations"<sup>54</sup> and ends by concluding that perceptual experiences are independent, at least for their intentional characteristics, of the perceiver's environment. Insisting that the individualist's inference "has no force," Burge offers an anti-individualist argument which explicitly accepts the individualist's assumption that we could have the same perceptual experiences while hallucinating. He embraces the view which I reject, namely, that we can have "perceptual representations that are misperceptions or hallucinations,"<sup>55</sup> and thus have perceptual representations even when we are not perceiving anything.

Burge notes that "the idea that the mind is somehow self-contained seems common to individualists."<sup>56</sup> It is precisely the view that perceptual experiences are wholly self-contained which the causal argument against direct realism, or the argument from physiology, attempts to establish. Those who employ the causal argument or argument from physiology by insisting that genuinely perceptual experiences may be triggered wholly internally, and that genuinely perceptual experiences are therefore not dependent for their occurrence and nature on the occurrence and nature of external physical events, offer an internalist account of perceptual experience and content.

Rather than appraising the individualist's inference, I prefer to confront the premise of the individualist's argument head-on, denying the individualist's assumption that hallucinatory and genuinely perceptual experiences are the very same experience, and thus denying that we can have genuinely perceptual experiences even in the absence of appropriate, external physical objects. I deny that hallucinations are genuinely perceptual representations. Like Burge, I reject individualism for perceptual



representation. But unlike Burge, I challenge the individualist's assumption that hallucinatory and genuinely perceptual experiences are type-identical experiences.

Snowdon observes that the only arguments against the disjunctive theory of looks-statements, and in favour of the causal theorist's assumption of a common "non-world-involving experience" in hallucination and genuine perception, that are "worth taking seriously...are those which appeal to scientifically established facts about perceptual and hallucinatory processes."<sup>57</sup> It is therefore important to examine some of the scientific evidence which has been offered both in support of and against the common element thesis that hallucinatory and genuinely perceptual experiences are the very same experience. Since hallucination is a species of imagination, the scientific evidence which is relevant to the common element thesis is the evidence concerning the brain processes involved in imagination and genuine perception.

In arguing against the individualist's common element thesis, and in favour of an anti-individualist, or externalist, account of perceptual experience and content, I will be appealing to the data of two very different lines of research in cognitive psychology. In one set of experiments, the results indicate that visual imagination and visual perception involve different processing paths in the brain, and thus the activation of different areas of the brain. Imagining and perceiving are type-distinct experiences because altogether different parts of the brain are activated.

In the other set of experiments, the results suggest that visual imagination and visual perception utilize precisely the same processing paths in the brain, and thus precisely the same areas of the brain, but that the brain processes involved in imagination and perception proceed in opposite directions. Imagining and perceiving involve different brain events with different proximate neural causes of the shared activity in the visual cortex, and are therefore type-distinct experiences. Although visual imagination and visual perception share representations in the visual cortex, there is no scientific reason to identify imaginative and perceptual experiences solely with the representations in the visual cortex, rather than with the process of the activation of the representations, and thus no reason to identify hallucinatory and genuinely perceptual experiences. Where imaginative and perceptual experiences are identified, not with the shared representations *themselves*, but rather with the *activation* of the shared representations, a difference in the direction of activation of the shared representations entails a difference in the experiences themselves. Scientific evidence of a reversed direction of activation of representations in imagination and genuine perception suggests



that hallucinatory and genuinely perceptual experiences are not, after all, type-identical experiences, and thus not the very same experience. It is to the scientific evidence that I now turn.

- 1 J.M. Hinton, *Experiences: An Inquiry Into Some Ambiguities*, Oxford: Oxford University Press, 1973, p. 93.
- 2 Malcolm Budd, *Wittgenstein's Philosophy of Psychology*, London: Routledge, 1991, p. 106.
- 3 *Ibid.*, p. 107.
- 4 J.M. Hinton, "Visual Experience: A Reply to I.C. Hinckfuss," *Mind* 82 (1973), p. 278.
- 5 J.M. Hinton, "Visual Experiences," *Mind* 76 (1967), p. 226.
- 6 Hinton, *Experiences: An Inquiry Into Some Ambiguities*, p. 94.
- 7 Hinton, "Visual Experiences," p. 226.
- 8 J.L. Austin, *Sense and Sensibilia*, reconstructed from the manuscript notes by G.J. Warnock, Oxford: Oxford University Press, 1979, p. 51.
- 9 *Ibid.*, p. 54.
- 10 Bertrand Russell, *Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984, p. 63.
- 11 See William Child, "Vision and Experience: The Causal Theory and the Disjunctive Conception," *Philosophical Quarterly* 42 (1992), p. 299, for an alternative perspective on the connection between the causal theory of perception and the common element thesis. Child frames the connection in terms of a link between the "non-disjunctive view" and the "common ingredient" view.
- 12 R.J. Hirst, "Philosophical Conclusions," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 328.
- 13 R.J. Hirst, "Envoi," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 336.
- 14 H.V. Stainsby, "Sight and Sense-Data," *Mind* 79 (1970), p. 180.
- 15 R.J. Hirst, "Perceptual Consciousness," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 293.
- 16 John R. Searle, *Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987, pp. 57-8.
- 17 *Ibid.*, p. 75.

- 18 Peter Unger, "Our Knowledge of the Material World," *American Philosophical Quarterly*, monograph series 4 (1970), p. 44.
- 19 D.M. Armstrong, *A Materialist Theory of the Mind*, London: Routledge & Kegan Paul Ltd., 1971, p. 217.
- 20 *Ibid.*, p. 298.
- 21 John R. Searle, *The Rediscovery of the Mind*, Cambridge: The M.I.T. Press, 1992, p. 171.
- 22 R.J. Hirst, "Symposium: The Difference Between Sensing and Observing I," *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954), p. 215.
- 23 R.J. Hirst, "Perception, Science and Common Sense," *Mind* 60 (1951), pp. 498-9.
- 24 *Ibid.*, p. 503.
- 25 R.J. Hirst (ed.), *Perception and the External World*, New York: The Macmillan Company, 1965, p. 18.
- 26 D.F. Pears, "The Causal Conditions of Perception," *Synthese* 33 (1976), p. 25.
- 27 David Wiggins, "Freedom, Knowledge, Belief and Causality," in *Knowledge and Necessity, Royal Institute of Philosophy Lectures*, volume 3, 1968-69, London: Macmillan & Co. Ltd., 1970, p. 137.
- 28 Bertrand Russell, *The Analysis of Matter*, New York: Dover Publications, Inc., 1954, p. 320.
- 29 Michael Lockwood, *Mind, Brain and the Quantum: The Compound "I,"* Oxford: Basil Blackwell Ltd., 1991, p. 148.
- 30 Gilbert Ryle, *Dilemmas*, London: Cambridge University Press, 1969, p. 109.
- 31 Hirst, *Perception and the External World*, p. 10.
- 32 Howard Robinson, "The General Form of the Argument for Berkeleian Idealism," in *Essays on Berkeley: A Tercentennial Celebration*, John Foster and Howard Robinson (eds.), Oxford: Clarendon Press, 1988, p. 172.
- 33 Alan H. Goldman, *Empirical Knowledge*, Berkeley: University of California Press, 1991, p. 125.
- 34 R. Ziedins, "Knowledge, Belief and Perceptual Experiences," *Australasian Journal of Philosophy* 44 (1966), p. 70.
- 35 Hinton, *Experiences: An Inquiry Into Some Ambiguities*, p. 94.
- 36 *Ibid.*, p. 99.

- 37 See Hinton's rejection of the principle "Same cause, same effect," in *Experiences: An Inquiry Into Some Ambiguities*, pp. 75-6, George Pitcher's insistence that the principle "Like causes have like effects" is true for every cause and effect pair but not true for them under every description, in *A Theory of Perception*, Princeton: Princeton University Press, 1971, pp. 56 ff., and Robinson's discussion of Hinton's and Pitcher's views, in "The General Form of the Argument for Berkeleian Idealism," pp. 174 ff.
- 38 E.J. Lowe, "What Do We See Directly?" *American Philosophical Quarterly* 23 (1986), p. 282.
- 39 See Robinson, "The General Form of the Argument for Berkeleian Idealism," pp. 172 ff.
- 40 D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, p. 27.
- 41 Robinson, "The General Form of the Argument for Berkeleian Idealism," p. 172.
- 42 *Ibid.*, p. 173.
- 43 *Ibid.*
- 44 It is not clear from Robinson's contribution to the symposium, "The Objects of Perceptual Experience," *Proceedings of the Aristotelian Society*, supplementary volume 64 (1990), pp. 151-66, that his target is externalism about perceptual experience. However, his anti-externalist agenda is made explicit in his subsequent "Experience and Externalism: A Reply to Peter Smith," *Proceedings of the Aristotelian Society* 92 (1991-92), new series, pp. 221-3.
- 45 John Foster, A.J. Ayer, London: Routledge & Kegan Paul plc., 1985, p. 148.
- 46 *Ibid.*
- 47 See Paul Snowdon's contribution to the symposium, "The Objects of Perceptual Experience," *Proceedings of the Aristotelian Society*, supplementary volume 64 (1990), pp. 143 ff.
- 48 See Paul Snowdon, "Perception, Vision and Causation," *Proceedings of the Aristotelian Society*, new series 81 (1980-81), p. 192.
- 49 R.J. Hirst, *The Problems of Perception*, New York: Humanities Press Inc., 1978, p. 44.
- 50 Snowdon, "The Objects of Perceptual Experience," p. 136.
- 51 *Ibid.*
- 52 *Ibid.*, p. 137.
- 53 Robinson, "The Objects of Perceptual Experience," p. 151.

54 Tyler Burge, "Cartesian Error and the Objectivity of Perception," in *Subject, Thought, and Context*, John McDowell and Philip Pettit (eds.), Oxford: Oxford University Press, 1986, pp. 124-5.

55 *Ibid.*, p. 125.

56 *Ibid.*, p. 118.

57 Snowdon, "The Objects of Perceptual Experience," p. 130.

## Chapter 3

### Why the Common Element Thesis Is False

#### 3.1 Evidence for A Shared Medium of Representation in Imagination and Perception

If introspective phenomenology is inherently unreliable, what are the scientific considerations in favour of the view that hallucinations and genuine perceptions involve type-identical experiences? Most of the experimental evidence for a shared medium of representation in imagination and perception comes from cognitive science experiments on information retrieval times in mental imagery. The relevance of cognitive science experiments on mental imagery to the common element thesis that hallucination and genuine perception are the very same experience may not be obvious unless one appreciates that most contemporary philosophers and psychologists regard hallucination as a species of imagination. Hirst, for example, maintains that "hallucinations are realistic mental images taken to be real things."<sup>1</sup> Baylis classifies hallucination with imagination, contrasting the images of hallucination with the objects of sensory or perceptual awareness.<sup>2</sup> The psychologist Hebb regards hallucination as spontaneous imagery which the subject might take for a perception even if the subject knows that he is not perceiving.<sup>3</sup>

In a well-known series of experiments on the mental rotation of images,<sup>4</sup> Shepard argues that mental images can be mentally rotated in a functionally spatial medium of representation, and that the rotation and transformation of images involves the same mechanisms as those involved in the visual perception of motion. In Shepard's experiments, subjects attempted mentally to rotate a three-dimensional block figure to determine whether it was the same as another block figure but at a different angle. Shepard found that the greater the angular difference between the two figures, and thus the greater the mental rotation required, the longer it took for the subjects to decide whether they were the same figure. The time required for subjects to determine whether a test figure was a rotated version of a standard figure was a linear function of their degree of angular disparity, which suggests that subjects rotated a mental image of the test figure at a fixed rate of rotation.

In an equally familiar series of experiments on scanning mental images,<sup>5</sup> Kosslyn argues that mental imagery and perception share an analogue, functionally spatial



medium of representation, and that mental images have functionally spatial properties which enable them to be scanned like spatially located objects. He believes that his experiments show that subjects attend to certain parts of their mental images, and then shift their attention across their mental images, scanning them like they were scanning a perceived stimulus. Kosslyn theorizes that subjects scan and inspect images mapped by the visual system onto the visual buffer of the occipital visual cortex in much the same way that we scan and inspect images on a television screen, looking for and picking out details of our mental images. In one experiment, Kosslyn's subjects learned to draw a simple map of an imaginary island with various landmarks such as a well, a lake or a hut. They were then instructed to form a mental image of the map and focus mentally on one of the landmarks on the map. The subjects were then presented with a probe word which only sometimes named an item on the map, and were required to look for the object on their mental image of the map. Kosslyn found that the greater the distance between the landmarks, and thus the greater the scanning distances required, the longer it took for the subjects to retrieve information from their mental images. There was a linear relationship between scanning distance required and information retrieval time, which suggests that subjects scanned across their mental images at a fixed rate of scanning.

It is also a truth of folk psychology that visually imagining something is easier if one closes one's eyes. Cognitive scientists believe that seeing interferes with visually imagining because they share a common mechanism of representation in the brain. The thesis that imagination and perception share a medium of representation thus receives support from experimental evidence that like-modality imagination and perception interfere with each other more than imagination and perception in different modalities. Segal argues that mental images interfere with our ability to detect signals.<sup>6</sup> He found that it is harder for subjects to detect a visual signal when visually imagining something than when aurally imagining something. Visual sensitivity is worse when visually imagining than when aurally imagining, and best when not imagining at all. The fact that mental imagery can interfere with perceiving suggests that imagination and perception interact at a common level of processing, sharing common mechanisms and processing paths in the brain, and thus the activation of the very same areas of the brain.

Finke argues that there are various "levels of equivalence" between mental imagery and perception.<sup>7</sup> Finke's studies of after-effects in visual imagery that are normally found in visual perception, such as colour after-effects, convinced him that

mental imagery and perception share brain mechanisms, and that visual images are genuinely visual representations. Finke's "interactive" theory holds that "imagining an object leads to the activation of the very same perceptual mechanisms that are used in perceiving the object."<sup>8</sup> Experimental evidence suggests that mental images and physical objects are functionally equivalent at levels in the visual system where information about size, shape and orientation are processed, but are functionally different at levels where information about brightness, colour and relative contrast are processed.<sup>9</sup>

Farah presents detailed scientific evidence that visual imagery involves activation of the occipital visual cortex, specifically, the visual buffer, and utilizes occipital visual representations. Visual imagery involves "visual cortical regions that are normally activated in early visual perception."<sup>10</sup> The formation or generation of a visual image "consists of activating cortical visual representations,"<sup>11</sup> that is, "relatively early representations in the visual system, at the level of the occipital lobe."<sup>12</sup> Farah believes that visual imagery and visual perception share both the same visual processing areas of the brain, namely, the occipital visual cortex, and the same *functional mechanisms*, that there are "visual perceptual mechanisms in visual mental imagery."<sup>13</sup> Hebb goes so far as to claim that "The mechanism of imagery is an aberrant mechanism of exteroception."<sup>14</sup>

In support of her view that the occipital visual cortex is involved in visual imagery, Farah relies upon case reports that subjects suffering impairment of vision as a result of damage to the occipital cortex invariably suffer impairment of visual imagery. For example, subjects with impaired colour vision suffer impaired colour imagery, and subjects with visual localization or identification impairment generally suffer impairment of localization or identification in visual imagery. These facts suggest that at least some of the areas of the occipital visual cortex are both involved in, and required for, visual imagery. Farah also cites electrophysiological evidence that the occipital visual cortex is involved in visual imagery, explaining that researchers have discovered that "visual imagery is accompanied by alpha rhythm attenuation over the visual areas of the brain."<sup>15</sup> She also appeals to the neurophysiological evidence that visual imagery tasks and visual perception tasks result in similar increases in blood flow in the occipital visual cortex. Regional cerebral blood flow measurements conducted by Goldenberg *et al* have recorded a pattern of occipital blood flow in mental imagery tasks similar to that obtained in perceptual tasks, indicating involvement of the visual areas of the brain in visual imagery.<sup>16</sup> Utilizing magnetic resonance imaging, Le Bihan *et al* have produced

evidence of visual striate cortex activity in visual imagery tasks.<sup>17</sup> Farah has also found that visual imagery influences event-related potentials to visual stimuli within the first 200 milliseconds of visual stimulus processing.<sup>18</sup>

Shepard, Kosslyn, Finke and Farah have all produced extensive scientific evidence of a shared medium of representation in imagery and perception. Shepard and Kosslyn believe that their mental rotation and scanning experiments show that mental imagery, like perception, occurs in an analogue, functionally spatial medium or format of representation, and that mental imagery and perception share processing mechanisms in the brain. Similar to Finke's levels of equivalence, Kosslyn believes that there are twelve processing subsystems common to visual imagination and visual perception.<sup>19</sup>

### 3.2 Pictorialism Versus Descriptionalism

The question whether mental imagery and perception have mechanisms in common is distinct from the question of the medium or format of representation in mental imagery and perception. Shepard, Kosslyn and Fodor are pictorialists about mental imagery, maintaining that mental images are "quasi-pictorial," representing in the manner of pictures by depicting their objects. Anderson, Dennett, Pylyshyn and Reed are descriptionalists about mental imagery, claiming that mental images represent in the manner of language by describing their objects. For pictorialists, mental images are quasi-pictorial, and analogue or continuous. For descriptionalists, mental images are abstract, discrete, conceptual and cognitive. Descriptionalists maintain that mental imagery is both discursive and propositional. But pictorialists and descriptionalists agree that mental imagery and genuine perception share the same processes and structures.

Pylyshyn maintains, not that mental representations in mental imagery and perception are descriptions, but rather that mental representations in mental imagery and perception *function as* descriptions, and are thus "related to the objects they represent in the way sentences are related to the objects they describe."<sup>20</sup> But this renders all mental representation, including perceptual representation which occurs only at low-level perceptual processing, essentially referential, interpretative and semantic. Even the most basic perceptual representations would be related to the things they represent by a relation of interpretation, and thus meaning. Every instance of mental representation would be cognitive. Consider, for example, Pylyshyn's view that mental

imagery is a form of "deliberate rational thought."<sup>21</sup> He also describes imagining as "a species of common-sense reasoning."<sup>22</sup>

Anderson, Dennett, Pylyshyn and Reed are descriptionalists about mental imagery because they believe that mental images are encoded in the same abstract propositional format utilized to encode verbal information. Descriptionalists are propositional theorists about perceiving because they identify the output or product of perception with a propositional representation,<sup>23</sup> and insist that mental imagery and perception share propositional representations. Pictorialists maintain that visual and verbal information are encoded in altogether different formats or media. Kosslyn and Pomerantz argue that, since information can be internally represented in at least two different formats, it need not be internally encoded in a propositional format.<sup>24</sup> Pictorialists and descriptionalists agree that mental imagery and perception share mental representations, but disagree about the format or medium of the shared representations.

Descriptionalists insist that there is only one form of mental representation, namely, propositional descriptive or discursive representation, and that mental images represent in the manner of language rather than pictures, describing rather than depicting. Pictorialists recognize at least two varieties of mental representation, namely, descriptive and pictorial, and maintain that the representation involved in mental imagery, unlike the representation involved in linguistic representation, occurs in an analogue, functionally spatial medium.

I do not intend to enter the traditional "imagery debate," the dispute about the format or medium of imagistic representation, and side with either pictorialists or descriptionalists in their disagreement about whether mental imagery constitutes a distinct form of mental representation from the symbol manipulation involved in linguistic representation. My interest in mental imagery is solely with the relationship between imagistic and perceptual representation, not with deciding whether imagistic representation involves an analogue, functionally spatial medium of representation or a propositional, symbolic medium of representation. I am not interested in determining the format or medium of imagistic representation. I am interested only in the connections, if any, between imagistic and perceptual representation.

The common element thesis constitutes a threat to direct realism regardless of whether the mental representations which are allegedly common to imagery and perception are pictorialist or descriptionalist in format. My concern will be strictly with

the questions whether mental imagery shares representations with perception, and whether the sharing of representations entails type-identical experiences. My evaluation of the common element thesis, and my appeal to evidence from cognitive science, do not require a commitment on the pictorialist/descriptionalist dispute about the format of mental images, although it should be clear from what follows that I believe in the existence of an irreducibly iconic form of perceptual representation, and thus reject the descriptionalist's notion that perceptual representation is essentially propositional in form. Unlike descriptionalists, I do not believe that perceptual representation is essentially abstract, symbolic, descriptive and propositional in format. While I maintain that perceptual representation is essentially iconic, I take no position on the medium or format of imagistic representation.

### 3.3 Pictorialism and Sperling's Iconic Sensory Storage

Kosslyn and Pomerantz regard perception as "a process of information reduction,"<sup>25</sup> in which information is selected from a larger pool of available information. Pictorialists like Dretske, Kosslyn and Pomerantz are heavily influenced by Sperling's pioneering experiments on iconic sensory storage.<sup>26</sup> Sperling briefly exposed subjects to an array of nine or more letters or numbers. The short duration of the exposure, namely, 50 milliseconds, ruled out systematic eye movements on the part of the subjects. The subjects then attempted to recall as many of the presented letters or numbers as possible. Sperling then exposed subjects to a brief tone 150 milliseconds after their brief presentation of the array of letters or numbers. A high-pitched tone instructed the subjects to recall only the letters or numbers in the top row of the presented array, a low-pitched tone instructed them to recall only the letters or numbers in the bottom row, and a middle-pitched tone instructed them to recall only letters or numbers from the middle row of the array.

Sperling found that subjects could direct their attention to letters or numbers fully 150 milliseconds after the extinction of the visual stimulus array. Which letters of the array they successfully recalled depended upon whether the tone they heard after extinction of the stimulus array was high-, middle- or low-pitched. Although subjects could normally recall only about five letters or numbers in the array, their sensory experience contained information about more than five letters or numbers. Subjects could direct their attention to this information depending upon the pitch of the tone they heard after the stimulus array was extinguished. Sperling's research shows that, after the visual stimulus has been extinguished, the information contained in it persists briefly



in iconic sensory storage. Sensory experiences contain more information than can be extracted at any one time by cognitive processing. Haber explains that, "for a predetermined brief period of time after the display ended the tone permitted the subject to report much more visual information than he could have if he had attempted to report everything he had seen."<sup>27</sup>

Sperling hypothesized that the subjects were directing their attention to a visual information store, what Neisser later termed an "icon" and what Dretske calls a "lingering sensory representation." Perception is selective in that we see much more than we can visually attend to or notice. Perceptual experiences carry more information than can be extracted by higher-level cognitive processing. Just as there is more information in the physical environment than can be transduced by the senses and encoded in perceptual experiences, there is more information in our perceptual experiences than can be processed by cognitive systems. Even after perceptual stimuli have been extinguished, we can continue to extract information and discover alternative interpretations of the information contained in our perceptual experiences.

Sperling's research shows that there is a level of visual processing, namely, the conversion of the visual stimulus into an iconic visual information store, which occurs prior to any effects of attention or noticing. Sensory experiences contain far more information than can be extracted at any one time by cognitive processing. Although icons contain information which requires propositional expression, I deny that icons themselves are propositional in structure. Those philosophers who insist that attention or noticing is a necessary condition of seeing must explain the extensive experimental evidence collected since Sperling's pioneering experiments in support of an iconic visual information store which occurs prior to any attention or noticing on the part of the percipient. Sperling's experiments on iconic information storage helped to convince Dretske and others that there is a species of simple non-epistemic perception which is wholly free of any cognitive activities like attention, noticing, identification or recognition.

Haber explains that the "content of iconic storage" is "an unorganized collection of primitive features of the visual field."<sup>28</sup> The icon must be free of any "analysis, integration, or labeling, so that the material is uncoded, unidentified, unrecognized, and unfamiliar."<sup>29</sup> In so far as discrimination of an object from its background constitutes organization of the visual field, I believe that Dretske's requirement that whatever is perceived be discriminated from its surroundings is incompatible with the iconic sensory



storage which is central to his account of non-epistemic perception. Faced with a choice between accepting iconic sensory storage, that is, accepting the notion that perceptual experiences or sensory representations contain more information than can be extracted at any one time by cognitive processing, and positing perceptual discrimination as a necessary condition of perceiving, I believe that we must abandon the notion that perceptual experiences essentially involve discriminating objects from their backgrounds.

Kosslyn argues that, "Before one can recognize an object, 'figure' must be segregated from 'ground'".<sup>30</sup> Obviously, figure/ground segregation being necessary for visual *recognition* of an object does not entail that it is necessary for visual *perception* of an object. Given that Dretske acknowledges a wholly non-recognitional species of perception, his non-epistemic perceiving, why does he insist that visual discrimination of an object from its background is a necessary condition of seeing the object? Perhaps he believes that the selective responses of cells in the earliest stages of visual processing, cells like edge detectors, are necessary conditions of visually perceiving, and constitute visually discriminating objects from their backgrounds. But even if the activity of cells like edge detectors is a necessary condition of seeing, edge detectors do not separate *objects* from their backgrounds, but are instead only contrast detectors. Since edge detectors do not isolate objects from their backgrounds, there is no reason to make visual discrimination of objects from their backgrounds a necessary condition of seeing the objects.

Icons persist briefly, roughly a quarter of a second, after the extinction of the visual stimuli, and contain features of the visual stimuli which have been extracted by detector processes located between the retina and the cortex.<sup>31</sup> Since Neisser's research indicates that elementary figure/ground separation is not, in fact, a feature of the icon, but is instead the result of subsequent processing,<sup>32</sup> Dretske and others are mistaken in making perceptual discrimination of an object from its background a necessary condition of perceiving the object. The icon, or visual information store, can be formed, and thus vision occur, without any process of separation of figure from ground, or object from background, occurring. Hochberg argues that figure/ground separation is actually *constructed* since we usually cannot see an entire figure against its ground in a single glance.<sup>33</sup> Rather than a primitive feature of our perceptual experience, figure/ground separation is a constructed feature based upon the integration of several glances.

Having examined some of the scientific evidence for a shared medium of representation in mental imagery and perception, I turn now to two different lines of recent experimental research on mental imagery which I believe show that hallucinatory and genuinely perceptual experiences are not type-identical experiences, and that the causal theorist's common element thesis is false. In the first series of experiments, the evidence suggests that hallucinations and genuine perceptions involve different brain processing paths, and thus different areas of the brain, and so different experiences. In the second series of experiments, the evidence suggests that hallucinations and genuine perceptions involve precisely the same brain processing paths, and thus the same areas of the brain, but in a reversed direction of processing. Since hallucination and genuine perception involve different brain processes, they remain type-distinct experiences despite sharing the same representations.

### 3.4 Images Are Not Percepts If They Are Not Ambiguous Like Percepts

In an interesting series of experiments, Chambers and Reisberg argue that subjects have difficulty discovering alternative interpretations in their mental images, but not in their percepts, because mental imagery and perception utilize different processing paths in the brain.<sup>34</sup> Chambers and Reisberg found that when subjects who were unfamiliar with the ambiguous duck/rabbit figure were instructed to form a mental image of the figure and then inspect their mental image for an alternative interpretation, *none* of the subjects was able to reverse the mental image and to discover its alternative interpretation. But when the subjects were asked to draw a picture of their own mental image of the duck/rabbit figure and then to view their drawing, *all* of the subjects were able to reverse the figure and to discover the alternative interpretation in their own drawing.<sup>35</sup>

Chambers and Reisberg argue that, despite "obvious phenomenal similarities" and levels of functional equivalence, mental imagery and perception remain fundamentally different cognitive activities. Perception is largely concerned with the *interpretation* of stimulus objects, whereas mental imagery is concerned with the *creation* of symbols for things, symbols which neither require nor admit subsequent interpretation. The interpretation of mental images is implicit in their creation. Since mental images are not construed in the first place, but instead arrive ready-interpreted, they cannot be reconstrued to discover alternative interpretations. Chambers and Reisberg plausibly argue that, "without a construal process, there is no possibility for reconstrual."<sup>36</sup> If mental images cannot be alternatively construed, then "there is no

such thing as an ambiguous image."<sup>37</sup> Chambers's and Reisberg's experiments on imagining ambiguous figures suggest that noticing an aspect involves interpretation, and that it is because mental images are not interpreted in the first place that images, unlike percepts, are not subject to re-interpretation, and thus aspect switches.

The fact that mental images are created as symbols of things, and therefore require no subsequent interpretation, does not, of course, prevent mental images from having unnoticed and unintended features which can be noticed and revealed upon inspection. We might be surprised to discover that we hardly ever imagine faces in profile although we frequently see faces in profile in everyday vision. We thereby learn by inspecting our images that we usually visually imagine objects from viewpoints which, in vision, are optimal for identification or recognition of the objects. The fact that our mental images neither require nor admit subsequent interpretation does not prevent them from having features which, until we inspect our mental images for these features, remain unnoticed.

Chambers and Reisberg believe that their results count against the thesis that mental imagery and perception share a common processing path in the brain. If mental imagery and perception involve different processing paths in the brain, then they must involve different areas or parts of the brain, and hence different experiences. Although imagination and perception have phenomenal, qualitative or subjective similarities, they are type-distinct experiences involving activation of different parts of the brain. Chambers's and Reisberg's conclusion that mental images are ready-interpreted signs of things, and that mental imagery, unlike perception, is not an interpretative process, confirms Wittgenstein's view that mental imagery is depictional, rather than observational. Budd explains that, for Wittgenstein, "it is definitive of the attitude of someone who is imaging that he is not behaving in the manner of an observer."<sup>38</sup> Our relation to what we imagine, unlike our relation to what we perceive, is not that of an observer. Visualizing does not involve utilizing recognitional capabilities. With its process of forming images, visualizing is akin to depicting, in which images are representatives of the things which we intend the images to depict. No interpretation of the depiction is required since we determine what the image depicts in the process of forming the image. Like Wittgenstein, Heil observes that imagining "resembles *drawing*--as distinct from *observing* or '*interpreting*'--a picture or a diagram."<sup>39</sup> It is difficult to discover alternative interpretations in our mental images because we do not stand to our mental images as an observer in an interpretative relationship.

Chambers's and Reisberg's conclusion that mental imagery is not a pictorial, quasi-perceptual mode of representation because mental images, unlike perceived objects, do not admit of reinterpretation has ostensibly received support from Slezak's experimental studies of mental images of ambiguous figures.<sup>40</sup> In his investigation of the alleged pictorial, quasi-perceptual medium in imagistic representation, Slezak found that subjects were unable to discover alternative interpretations in their mental images. He concluded that mental images are "highly interpreted conceptualizations" rather than "raw, uninterpreted geometric shapes in a 'spatial' medium."<sup>41</sup>

Although Slezak believes that his results confirm Chambers's and Reisberg's findings, he employed a different experimental procedure since his subjects, unlike those in Chambers's and Reisberg's studies, were explicitly instructed to rotate their mental images. Given this considerable difference in experimental design, the fact that only one of the studies involved mental rotation tasks, there is some question whether his findings really confirm the results obtained by Chambers and Reisberg, and lend support to the view that mental images are not subject to reinterpretation because they are not interpreted in the first place.

In Slezak's experiments, subjects were shown a figure which was immediately recognizable as a duck when viewed upright, but as a rabbit when viewed after having been rotated ninety degrees to the left. He explains that his "subjects were shown the figures in only one orientation and then asked to *imagine* them rotated by 90 degrees."<sup>42</sup> Slezak's brief description of his experiment suggests that his subjects were permitted to view the ambiguous figures throughout their attempt to imagine the figures rotated ninety degrees. This interpretation is encouraged by the fact that the quote above is immediately preceded by a claim that his stimulus figures were "considerably simpler" than the block figures used in Shepard's experiments on mental rotation. Recall that, in Shepard's studies, subjects were shown a pair of block figures and then asked to determine whether they were the very same figure, but at different orientations, by mentally rotating one of the figures until it assumed the same orientation as the other figure. The stimulus figures in Shepard's studies were in full view of the subjects throughout the mental rotation task.

In contrast, The subjects in Chambers's and Reisberg's studies were shown the ambiguous perceptual stimulus for only five seconds, thereby ensuring that the subjects' subsequent failure to discover alternative interpretations in their mental images was idiosyncratic of mental imagery, and not attributable to any perceptual interaction with



the perceptual stimulus. By removing the perceptual stimulus after five seconds, Chambers and Reisberg were able to test specifically imaginative capacities. If Slezak's subjects were, in fact, allowed to continue to view the ambiguous figures throughout the mental rotation task, much the way that Shepard's subjects continued to view the stimulus block figures throughout their mental rotation task, then the inability of Slezak's subjects to discover alternative interpretations in the ambiguous figures is all the more surprising and mysterious. Perhaps their inability to discover alternative interpretations was the result of dominance by, and thus interference from, the perceptual stimulus. The continuing availability of the perceptual stimulus might have allowed the original interpretation of the perceptual stimulus to dominate the imaginative search process, thereby inhibiting the discovery of alternative interpretations. In effect, the perceptual interpretation would trump any imaginative interpretation. Rather than demonstrating the lack of interpretative processes in mental imagery, and thus demonstrating that imagination and genuine perception involve different processes in the brain, and so different experiences, Slezak may simply have demonstrated that the interpretative processes in mental imagery carry less weight than the interpretative processes in perception.

But equally, the continuing availability of the perceptual stimulus should have *facilitated* the discovery of the alternative interpretation of the ambiguous figure since the task remained essentially perceptual. It is peculiar that Slezak's subjects did not discover the alternative perceptual interpretation in the perceptual stimulus while they were attempting to rotate the figure mentally, and then report the alternative perceptual interpretation as their alternative imaginative interpretation. It seems as though the mental rotation task somehow inhibited the perceptual interpretative process, thereby preventing the subjects from discovering the alternative perceptual interpretation. Had they not been trying mentally to rotate the ambiguous figure, they would probably have discovered its alternative interpretation. Here, the imaginative processes trump the perceptual processes, preventing the discovery of alternative perceptual interpretations. In effect, the imaginative search for novel interpretations inhibits perceptual processes from discovering alternative perceptual interpretations. As before, the results can be viewed, not as demonstrating the lack of interpretative processes in mental imagery, but rather as demonstrating that the interpretative processes in mental imagery carry more weight than the interpretative processes in perception.

Whatever way we choose to interpret Slezak's results, the fact remains that, by combining Chambers's and Reisberg's ambiguous figures task with Shepard's mental



rotation task, Slezak has produced evidence, not of the absence of interpretative processes in mental imagery, but rather of the interaction between imaginative and perceptual processes. Regardless of whether we view his results as evidence of the dominance of perceptual processing over imaginative processing or as evidence of the dominance of imaginative processing over perceptual processing, his results indicate that imaginative and perceptual processing can interfere with one another. This is especially ironic since it is just the sort of evidence which cognitive psychologists like Segal appeal to in support of their view that mental imagery and perception share mechanisms and media of representation, a view which Slezak adamantly opposes. By combining imaginative and perceptual tasks in his experimental procedure, Slezak has produced evidence for, not against, the view that imagination and perception share a common mode or medium of mental representation.

Although Slezak's findings superficially lend welcome support to Chambers's and Reisberg's conclusion that mental imagery and perception involve different brain processing paths because only perception allows reinterpretation of its objects, there are two major reasons to question the reliability of that support. First, Slezak's study, unlike Chambers's and Reisberg's experiments, was explicitly a mental rotation experiment, making the comparison of results problematic. Having employed fundamentally different experimental procedures, there is some question whether the researchers were testing the same phenomenon. Secondly, since Slezak's subjects, unlike the subjects in Chambers's and Reisberg's experiments, were apparently allowed to continue to view the stimulus figures while attempting mentally to rotate the figures and to discover their alternative interpretations, the subjects' inability to discover alternative interpretations may be attributable to perceptual interference from the perceptual stimulus, rather than to the fact that mental images are uninterpreted, and so not susceptible to reinterpretation.

The combination of imaginative and perceptual tasks ensures that Slezak's negative results, that mental images, unlike perceived objects, do not allow reinterpretation because they are not interpreted in the first place, cannot be attributed unequivocally to idiosyncrasies of mental imagery since the imaginative capacity was not experimentally isolated from the perceptual capacity. By withdrawing the perceptual stimulus after five seconds, Chambers and Reisberg ensured that their negative findings could be attributed solely to idiosyncrasies of mental imagery. For these reasons, I regard Chambers's and Reisberg's results as more formidable support for the view that, since mental images, unlike perceived objects, are not subject to subsequent



reinterpretation, mental imagery and perception must involve different brain processes and operations, and thus different experiences.

In related research, Reed's experiments on pattern recognition in subjects who attempt to scan their mental images to retrieve new information suggest that subjects code visually presented patterns as structural descriptions and have difficulty later identifying or recognizing parts of the presented patterns which were not directly coded into their structural descriptions.<sup>43</sup> If the Star of David is coded as two overlapping but inverted triangles, subjects find it difficult to identify or recognize the three overlapping diamonds which also make up the figure. Subjects identify or recognize only those patterns which are parts of their structural descriptions of the visually presented patterns. Reed states that "An interesting question would be whether identical operations are used in trying to find an embedded figure in a visual image as in a perceptual pattern that is physically present."<sup>44</sup> Chambers's and Reisberg's studies of attempts to discover alternative interpretations in visual images of ambiguous figures, in which subjects could readily discover the alternative interpretations in physically presented patterns which they had been unable to discover in their mental images of those patterns, suggest that different operations are used in trying to find embedded figures in visual imagery and visual perception, and that our relation to visual images, unlike our relation to physically presented stimuli, is not interpretative.

Clark believes that Chambers's and Reisberg's experiments demonstrate that mental images are "bound to an interpretation in a way the percept is not."<sup>45</sup> Since mental images arrive ready-interpreted, imagining is essentially a matter of imagining *that* such and such is the case, representing things *as being* the case. Unlike perceiving, imagining therefore has an essential epistemic component. Pylyshyn explains that imagistic representations are "far from being raw, and, so to speak, in need of 'perceptual' interpretation."<sup>46</sup> Unlike percepts, images are "not subject to *perceptual* interpretation the way pictures are interpreted."<sup>47</sup>

Recall Macbeth's famous question: "Is this a dagger which I see before me, The handle toward my hand? Come, let me clutch thee: I have thee not, and yet I see thee still....And on thy blade and dudgeon gouts of blood, Which was not so before. There's no such thing: It is the bloody business which informs Thus to mine eyes."<sup>48</sup> Notice that there is no doubt in Macbeth's mind about the *identity* of the "fatal vision," only about its *reality* or *actual existence*. Macbeth does not query *what* he ostensibly sees. He is not trying to *interpret* what he sees, but rather trying to determine whether it is real or

only imaginary. The *identity* of the "fatal vision" is unambiguous. It is a dagger with a handle, and blood on its blade and dudgeon. This most celebrated example of hallucination aptly illustrates the point that hallucinatory images come ready-interpreted, and are thus representations *that* such and such is the case. We do not stand to hallucinatory images in the relation of observation or interpretation.

Mental images, unlike perceived objects, are not subject to reinterpretation because they are not interpreted in the first place. Unlike perceived objects, we do not stand to mental images in the relation of observation and interpretation. Since mental imagery and perception utilize different processing paths in the brain, and thus different areas or parts of the brain, and since hallucinations are species of imagination, hallucinations and genuine perceptions are type-distinct experiences, and the common element thesis that hallucinatory and genuinely perceptual experiences are the very same experience is false.

### 3.5 Why Type-Identical Brain Activity Does Not Entail Type-Identical Experiences

Unlike Chambers and Reisberg, who maintain that imagination and perception involve different processing paths, areas and mechanisms in the brain, Farah argues that visual imagery and visual perception utilize many of the same modality-specific cortical areas and representations.<sup>49</sup> But Farah has found evidence of "a distinct imagery mechanism, not used under normal circumstances for perception."<sup>50</sup> Since visual imagery and visual perception, despite utilizing precisely the same areas of the brain, do not utilize altogether the same brain mechanisms and processes, hallucinations and genuine perceptions are type-distinct experiences, and the common element thesis that hallucinatory and genuinely perceptual experiences are the very same experience is false.

In Farah's neural model of imagination and perception, the representations in the visual buffer of the occipital visual cortex which are common to visual imagery and genuine seeing have a reversed direction of activation, and thus have different proximate neural causes.<sup>51</sup> Hanson interestingly anticipates Farah by briefly considering the possibility that imagistic and visual experiences might involve changes which "run through 'in reverse'."<sup>52</sup> In imagination and hallucination, the proximate neural cause of the representations in the visual buffer is activity in the parietal and temporal lobes, originating in activity in the frontal lobe. In vision, the proximate neural cause of the representations in the visual buffer is activity in the optic nerves. Since

hallucinatory and genuinely perceptual experiences do not, in fact, have the same proximate neural cause, they do not require the same analysis regarding their content and objects. Genuinely perceptual experiences need not take internally generated objects.

Farah's research into the neural bases of visual imagery, including both studies of subjects with impaired parietal and temporal lobe activity and psychophysical measurements of normal subjects, have shown that the direction of information flow in visual imagery is opposite that in visual perception. She maintains that, while visual perception involves the *afferent* activation of a subset of the brain's visual areas, visual imagery involves the *efferent* activation of visual areas of the brain.<sup>53</sup> Farah concludes that visual image formation, unlike visual perception, requires the involvement of a component of the subject's cognitive architecture,<sup>54</sup> which is to say that visual imagery, unlike visual perception, is essentially epistemic or cognitive, essentially involving higher-level cognitive structures. Mental imagery, and thus hallucination, involves *output from*, rather than *input to*, interpretative cognitive systems. While perception *feeds* higher-level classificatory and interpretative systems, imagination is the *product of* such systems. Since the representations common to visual imagery and visual perception have a reversed direction of activation in imagination and perception, and thus have different proximate neural causes, *modified disjunctivists about experience* can intelligibly maintain that visual imagery and visual perception are type-distinct experiences, and thus do not require the same analysis with respect to experiential content and objects.

The fact that we can artificially activate representations in the visual buffer, thereby producing experiences which are phenomenally, qualitatively or subjectively indistinguishable from genuinely visual experiences, does not entail that we can artificially produce genuinely visual experiences, even in the absence of appropriate, external physical objects. For the way that the representations in the visual buffer are activated determines whether the experiences which result are instances of imagining or hallucinating or cases of genuinely perceiving. If the representations in the visual buffer are activated by activity in the frontal lobe via the parietal and temporal lobes, then the experience which results is an instance of imagining or hallucinating. But if the representations in the visual buffer are activated by activity in the optic nerves, then the experience which results is an instance of genuinely seeing. Representations in the visual buffer have different proximate neural causes in hallucination and genuine perception, and thus do not require the same analysis and need not take the same

content or objects. Unlike Chambers and Reisberg, Farah maintains that precisely the same areas of the brain are activated in hallucination and genuine perception, but these common areas are activated in entirely different ways by altogether different proximate neural causes. The proximate neural cause of activity in the visual buffer in hallucination is activity in the parietal and temporal lobes. The proximate neural cause of activity in the visual buffer in genuine vision is activity in the optic nerves.

The ability artificially to activate representations in the visual buffer by direct cortical stimulation of areas of the brain involved in genuine vision, such as the parietal and temporal lobes, and thereby produce an experience phenomenally, qualitatively or subjectively indistinguishable from genuinely visual experiences, is insufficient for the ability to produce genuinely visual experiences in the absence of appropriate, external physical objects. In order to produce genuinely visual experiences, the representations in the visual buffer must be activated, not by activity in the parietal and temporal lobes, but rather by activity in the optic nerves. Prosthetic eyes could produce genuinely visual experiences provided that they appropriately stimulated the optic nerves, ensuring that it is activity in the optic nerves, and not activity in the parietal and temporal lobes, which activates the representations in the visual buffer.

But we must be careful not to confuse the notion that activation of representations in the visual buffer can produce either hallucinatory or genuinely perceptual experiences depending upon the way that those representations are activated, that is, whether they are activated by activity in the parietal or temporal lobes or by activity in the optic nerves, with the traditional disjunctivist's notion that one and the same proximate neural cause can produce either hallucinatory or genuinely perceptual experiences depending upon the way that the proximate neural cause is itself brought about. On the proposed *modified disjunctivism about experience*, one which does not abandon Robinson's intuitively plausible principle "Same proximate cause, same immediate effect," it is *not* one and the same proximate neural cause which produces either hallucinatory or genuinely perceptual experiences, depending upon the way that the proximate neural cause is brought about. Unlike traditional disjunctivism, modified disjunctivism maintains that hallucinatory and genuinely perceptual experiences have altogether different proximate neural causes. Modified disjunctivism holds that hallucinations involve representations in the visual buffer which are produced by parietal and temporal lobe activity, while genuine perceptions involve representations in the visual buffer which are produced by activity in the optic nerves. Since hallucinations and genuine perceptions have different proximate neural causes, modified

disjunctivism need not implausibly maintain that one and the same proximate neural cause can have altogether different immediate effects depending upon the way that the cause is itself brought about.

It is important to be clear about what, exactly, is alleged to be common to mental imagery and perception. Farah maintains that visual imagination and visual perception: (1) share the same *areas* of the brain; (2) share the same *functional mechanisms* of the brain; and (3) both involve *activation of a representation* in the visual buffer. But she argues that altogether different *activities* or *processes* of the brain are involved in visual imagination and visual perception because the direction of brain activation or processing is reversed. There is, as she puts it, a "reverse direction of activation flow."<sup>55</sup> In visual imagination, activation of the representations in the visual buffer is the *effect* of activity in the frontal lobe via associative memory and the parietal and temporal lobes. In visual perception, activation of the representations in the visual buffer is the *cause* of activity in the frontal lobe via associative memory and the parietal and temporal lobes. Although precisely the same areas, paths, mechanisms and representations in the brain are involved in visual imagination and visual perception, imagistic and perceptual processing unfold in opposite directions, and are therefore entirely different brain processes. In visual imagination, activation of the representations in the visual buffer is the immediate effect of activity in the parietal and temporal lobes. In visual perception, activation of the representations in the visual buffer is the immediate effect of activity in the optic nerves. In visual imagination, a *cognitive* stimulus activates the representations in the visual buffer. But in visual perception, the representations in the visual buffer are activated by a *visual* stimulus.

Chambers and Reisberg believe that different brain processing paths, and thus different areas of the brain, are implicated in mental imagery and perception. Mental imagery and perception must therefore activate different mental representations. But like Shepard, Kosslyn and Finke, Farah believes that exactly the same mental representations are activated in mental imagery and perception. Since visual imagery utilizes precisely the same representations activated in visual perception, she concludes that visual imagery is a genuinely visual phenomenon. But since the mental representations common to mental imagery and perceiving are activated altogether differently in imagination and perception, imagining and perceiving are type-distinct activities or processes of the brain, and thus type-distinct experiences. Imagining is not the same as perceiving because the mental representations which they have in common are caused in a completely different manner. Although Farah disagrees with Chambers



and Reisberg about the brain areas and mental representations involved in hallucination and genuine perception, her results nicely complement those of Chambers and Reisberg, for if visual images are the output of, rather than the input to, higher-level, cognitive and interpretative systems, then it is only to be expected that visual images are not subject to reinterpretation. As the product of interpretative systems, visual images are not subject to interpretative processing, and so are not susceptible of reinterpretation.

### 3.6 What, Exactly, Are Mental Images and Hallucinatory Experiences?

The common element thesis that hallucinatory and genuinely perceptual experiences are the very same experience would be true if Shepard, Kosslyn, Finke and Farah are correct that hallucinations and genuine perceptions share mental representations and if hallucinatory and genuinely perceptual experiences are identified with the mental representations themselves. But if hallucinatory and genuinely perceptual experiences are identified, not with the shared mental representations themselves, but rather with the process of their activation, then the fact that the mental representations which hallucination and genuine perception share in common are activated in altogether different ways entails that hallucinatory and genuinely perceptual experiences are type-distinct experiences, and the common element thesis is false.

The experimental literature on mental imagery is almost completely devoid of reference to experiences. Since cognitive psychologists rarely speak of experiences, it is difficult to assess the implications of their research for the common element thesis that hallucination and genuine perception involve the very same experience. Cognitive scientists are also vague about what, exactly, they take mental images to be. Although Kosslyn claims that mental images are internal representations, he also describes "an image representation" as "a pattern of activation" in the visual buffer.<sup>56</sup> Block identifies mental images both with "certain kinds of subjective experiences"<sup>57</sup> and with "internal representations involved in mental imagery."<sup>58</sup> Kosslyn points out that "The term *image* is ambiguous, referring both to a phenomenological experience and to an internal representation (code) that gives rise to this perceptlike experience. In the present theory, 'image' refers to the internal representation, not the experience itself."<sup>59</sup> If mental images are the internal representations themselves, then the *having* or *experiencing* of mental images is plausibly construed as the *activation* of the internal representations, and the fact that the representations common to hallucination and genuine perception have a reversed direction of activation entails that they are type-distinct experiences.



Even if hallucination and genuine perception involve activation of precisely the same mental representations, we are not compelled to identify hallucinatory and genuinely perceptual experiences, as the common element thesis maintains, unless we identify these experiences with the mental representations themselves, rather than with the process of their activation. The point which I wish to make here is that there is no scientific reason that I know of to identify imagistic and perceptual experiences solely with the representations themselves, as opposed to the process of their activation. Nothing in the neuropsychological and neurophysiological literature which I am familiar with requires that experiences be identified strictly with the mental representations in the visual buffer, and thus precludes experiences being constituted by *both* the mental representations in the visual buffer *and* their immediate or proximate neural causes. If imagistic and perceptual experiences consist of more than just the mental representations themselves, then scientific facts about collateral brain processes and mechanisms involved in hallucination and genuine perception become relevant to deciding the truth of the common element thesis, and thus determining whether hallucination and genuine perception involve type-identical experiences.

It is my contention that there is no scientific reason to identify experiences solely with their mental representations, and that the scientific evidence which Farah and others have produced, which shows that representations in the visual buffer are activated in altogether different ways in hallucination and genuine perception, is directly relevant to settling the question whether hallucinatory and genuinely perceptual experiences are the very same experience. Recent neuropsychological and neurophysiological discoveries resolve an issue which arose within the Cartesian tradition and has been hitherto unresolvable by both philosophers and cognitive psychologists. I believe that this recent scientific evidence demonstrates for the first time that hallucinatory and genuinely perceptual experiences are type-distinct experiences, and that the common element thesis is therefore false. With different proximate neural causes of the representations which they share in common, hallucinations and genuine perceptions remain fundamentally different experience-types.

Farah maintains that "forming a mental image consists of activating cortical visual representations."<sup>60</sup> If hallucinatory and genuinely visual experiences are identified with the process of forming visual images, and if the process of forming visual images consists, not of the cortical visual representations themselves, but rather with the process of their activation, then hallucinatory and genuinely perceptual experiences are

identified, not with the cortical visual representations themselves, but rather with the process of their activation. Since cortical visual representations in hallucination and genuine perception are activated altogether differently, hallucinatory and genuinely perceptual experiences are type-distinct experiences, and the common element thesis is false. I believe that *forming* a mental image just is *bringing about the activation of* a mental representation. The *having* or *experiencing of* a mental image, and thus the experience of imagining, then consists of the *activation of* a mental representation, rather than the mental representation itself.

If Armstrong can maintain that a perceptual experience or sense-impression is the *event of acquiring* a belief or inclination to believe, and thus the *event of being caused to acquire* a belief or inclination to believe, rather than a belief representation or belief state itself, then it is surely equally legitimate to maintain that a visual experience or visual percept is the *event of the activation of* a representation in the visual buffer, and thus the *event of* a representation in the visual buffer *being caused to be active*, rather than a representation in the visual buffer itself. Since representations in the visual buffer are activated or caused in altogether different ways in hallucination and genuine perception, with a "reverse direction of activation flow," hallucinatory and genuinely perceptual experiences are type-distinct experiences, and the common element thesis is false.

There are no scientific reasons that I know of to identify visual experiences solely with mental representations in the visual buffer, rather than with both mental representations in the visual buffer and their proximate neural causes. Since mental representations common to visual imagery and visual perception have different proximate neural causes, imagistic and perceptual experiences are type-distinct experiences. Visual imagery and visual perception can share mental representations in the visual cortex without having to be the very same experience if experiences are identified, not simply with the mental representations in the visual cortex, but also with their proximate neural causes in collateral neural substrates.

The ability artificially to activate representations in the visual buffer by direct cortical stimulation of areas of the brain involved in genuine perception does not entail the ability artificially to activate genuinely visual experiences even in the absence of appropriate, external physical objects since activation of representations in the visual buffer by direct cortical stimulation of the parietal and temporal lobes produces only hallucinatory experiences, rather than genuinely visual experiences. Direct cortical

stimulation of the parietal and temporal lobes activates representations in the visual buffer in the opposite direction required to produce genuinely visual experiences.

We see, then, that we can accept both of Robinson's two propositions offered in support of the causal argument against direct realism without having to accept the conclusion that hallucinatory and genuinely perceptual experiences require the same analysis with respect to content and objects, and that direct realism and its constituent notion of a direct contact with external physical reality is false. If hallucinatory and genuinely perceptual experiences had precisely the same proximate neural cause, then they would require the same analysis with respect to content and objects, and direct realism would be refuted. If direct cortical stimulation of areas of the brain involved in genuine vision was sufficient to produce genuinely visual experiences, then direct realism would be false. But since Farah's research shows that direct cortical stimulation of areas of the brain involved in genuine vision is not, after all, sufficient to produce genuinely visual experiences, since direct cortical stimulation of the parietal and temporal lobes produces only hallucinatory experiences, we are not compelled to give hallucinatory and genuinely perceptual experiences the same analysis with respect to content and objects, and direct realism is not refuted. Direct cortical stimulation of areas of the brain involved in genuine vision is not sufficient to produce genuinely visual experiences, and Robinson's causal argument against direct realism is not, after all, vindicated.

- 1 R.J. Hirst, "Sense-Data and Common Sense," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 276.
- 2 Charles A. Baylis, "Foundations for a Presentative Theory of Perception and Sensation," *Proceedings of the Aristotelian Society* 66 (1965-66), p. 48.
- 3 D.O. Hebb, "Concerning Imagery," *Psychological Review* 75 (1968), p. 474.
- 4 See R.N. Shepard, "The Mental Image," *American Psychologist* 33 (1978), pp. 125-37, and R.N. Shepard and J. Metzler, "Mental Rotation of Three-Dimensional Objects," *Science* 171 (1971), pp. 701-3.
- 5 See Stephen Michael Kosslyn, "Information Representation in Visual Images," *Cognitive Psychology* 7 (1975), pp. 341-70, "Can Imagery be Distinguished from other forms of Internal Representation? Evidence from Studies of Information Retrieval Times," *Memory and Cognition* 4 (1976), pp. 291-7, and "The Medium and the Message in Mental Imagery: A Theory," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981, pp. 207-44.
- 6 Sydney Joelson Segal, "Processing of the Stimulus in Imagery and Perception," in *Imagery: Current Cognitive Approaches*, Sydney Joelson Segal (ed.), New York: Academic Press, Inc., 1971, pp. 69-100.
- 7 Ronald A. Finke, "Levels of Equivalence in Imagery and Perception," *Psychological Review* 87 (1980), pp. 113-32.
- 8 Ronald A. Finke, "Theories Relating Mental Imagery to Perception," *Psychological Bulletin* 98 (1985), p. 251.
- 9 Finke, "Levels of Equivalence in Imagery and Perception," p. 120.
- 10 Martha J. Farah, "The Neural Bases of Mental Imagery," forthcoming in *The Cognitive Neurosciences*, M.J. Gazzaniga (ed.), M.I.T. Press, p. 14.
- 11 *Ibid.*, p. 6.
- 12 *Ibid.*, p. 9.
- 13 Martha J. Farah, "Is Visual Imagery Really Visual? Overlooked Evidence from Neuropsychology," *Psychological Review* 95 (1988), p. 309.
- 14 Hebb, "Concerning Imagery," p. 468.
- 15 Farah, "Is Visual Imagery Really Visual? Overlooked Evidence from Neuropsychology," p. 311.
- 16 Farah, "The Neural Bases of Mental Imagery," p. 13.

- 17 *Ibid.*, p. 17.
- 18 *Ibid.*, p. 14.
- 19 Stephen Michael Kosslyn, "Seeing and Imagining in the Cerebral Hemispheres: A Computational Approach," *Psychological Review* 94 (1987), p. 169.
- 20 Zenon W. Pylyshyn, "Imagery and Artificial Intelligence," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981, p. 184.
- 21 Zenon W. Pylyshyn, "The Imagery Debate: Analog Media Versus Tacit Knowledge," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981, p. 165.
- 22 *Ibid.*, p. 186.
- 23 John R. Anderson, "Arguments Concerning Representations for Mental Imagery," *Psychological Review* 85 (1978), pp. 251, 259.
- 24 Stephen Michael Kosslyn and James R. Pomerantz, "Imagery, Propositions, and the Form of Internal Representations," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981, pp. 156-7.
- 25 *Ibid.*, p. 154.
- 26 George Sperling, "The Information Available in Brief Visual Presentations," *Psychological Monographs* 74 (1960), whole number 498. For an accessible introduction to Sperling's interesting work, see Roger Brown's and Richard J. Herrnstein's "Icons and Images," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981, pp. 19-49.
- 27 Ralph Norman Haber, "Where Are the Visions in Visual Perception?" in *Imagery: Current Cognitive Approaches*, Sydney Joel Segal (ed.), New York: Academic Press, Inc., 1971, p. 34.
- 28 *Ibid.*, p. 37.
- 29 *Ibid.*, p. 45.
- 30 Kosslyn, "Seeing and Imagining in the Cerebral Hemispheres: A Computational Approach," p. 152.
- 31 Haber, "Where Are the Visions in Visual Perception?" p. 37.
- 32 *Ibid.*, p. 38.
- 33 *Ibid.*, p. 47.
- 34 Deborah Chambers and Daniel Reisberg, "Can Mental Images Be Ambiguous?" *Journal of Experimental Psychology: Human Perception and Performance* 11 (1985), pp. 317-28. Andy Clark draws on Chambers's and Reisberg's studies in his paper

"Superman and the Duck/Rabbit: A Reply to Gordon and Bringsjord," *Analysis* 48 (1988), pp. 54-57. He argues persuasively against the view that mental imagery involves quasi-perceptual cognitive processes, claiming that functionally different operations are performed on mental images and perceived objects. Since at least some of the operations which can be performed on perceived ambiguous figures, such as discovering alternative interpretations, cannot be performed on mental images of ambiguous figures, imagining and perceiving must involve different cognitive processes and operations.

35 As early as 1957, Noel Fleming suggested that someone might call up a perfect memory image of the ambiguous duck/rabbit figure, having seen it before only as a duck, and be unable to see its rabbit aspect. See Fleming, "Recognizing and Seeing As," *Philosophical Review* 66 (1957), pp. 161-79.

36 Chambers and Reisberg, "Can Mental Images Be Ambiguous?" p. 318.

37 *Ibid.*

38 Malcolm Budd, *Wittgenstein's Philosophy of Psychology*, London: Routledge, 1991, p. 113.

39 John Heil, *The Nature of True Minds*, Cambridge: Cambridge University Press, 1992, p. 176.

40 Peter Slezak, "Reinterpreting Images," *Analysis* 50 (1990), pp. 235-43.

41 *Ibid.*, p. 242.

42 *Ibid.*

43 Stephen K. Reed, "Structural Descriptions and the Limitations of Visual Images," *Memory and Cognition* 2 (1974), pp. 329, 334.

44 *Ibid.*, p. 336.

45 Clark, "Superman and the Duck/Rabbit: A Reply to Gordon and Bringsjord," p. 56.

46 Pylyshyn, "Imagery and Artificial Intelligence," p. 173.

47 *Ibid.*

48 William Shakespeare, *Macbeth*, Ware: Wordsworth Editions Ltd., 1993.

49 Farah, "Is Visual Imagery Really Visual? Overlooked Evidence from Neuropsychology," and Martha J. Farah, Franck Péronnet, Marie Anne Gonon and Marie Hélène Giard, "Electrophysiological Evidence for a Shared Representational Medium for Visual Images and Visual Percepts," *Journal of Experimental Psychology: General* 117 (1988), pp. 248-57.

50 Farah, "The Neural Bases of Mental Imagery," p. 1.



- 51 *Ibid.*, p. 20.
- 52 Norwood Russell Hanson, "On Having the Same Visual Experiences," *Mind* 69 (1960), p. 346.
- 53 Farah, private correspondence, and "The Neural Bases of Mental Imagery," p. 15.
- 54 Farah, "The Neural Bases of Mental Imagery," p. 20.
- 55 *Ibid.*
- 56 Kosslyn, "Seeing and Imagining in the Cerebral Hemispheres: A Computational Approach," p. 154.
- 57 Ned Block, "Introduction: What is the Issue?" in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981, p. 7.
- 58 *Ibid.*, p. 9.
- 59 Kosslyn, "Seeing and Imagining in the Cerebral Hemispheres: A Computational Approach," p. 149.
- 60 Farah, "The Neural Bases of Mental Imagery," p. 6.

## Chapter 4

### Are Hirst, Armstrong and Searle Representationalists?

#### 4.1 Two Interpretations of Representationalism

Direct realism is the view that there is a world of external and public, physical existents which do not depend for their existence and nature upon being perceived, and which we can perceive directly or immediately. The direct realist's notion that we perceive the external physical world directly or immediately may be interpreted either as a metaphysical thesis in terms of an absence of perceptual intermediaries like ideas or sense-data, or as an epistemological thesis in terms of an absence of any suggestion or inference. On the metaphysical interpretation, direct realism maintains that we can be directly perceptually aware of, or in direct perceptual contact with, external physical objects themselves, rather than their perceptual representatives.

As a response to direct realism, indirect realism or representationalism is viewed, not simply as a rejection of direct perceptual awareness of external physical objects, but also as an assertion both of direct perceptual awareness of their perceptual representatives and of indirect perceptual awareness of external physical objects. For a denial of direct perceptual awareness of external physical objects in the absence of a rejection of direct perceptual awareness *tout court* implies that there is something else which we are directly perceptually aware of. Indirect realism or representationalism is thus construed as the thesis that there are two fundamentally different types of perceptual awareness, one direct and the other indirect, and that we are perceptually aware of external physical objects only indirectly in virtue of being directly perceptually aware of internal non-physical existents or objects, such as ideas or sense-data. Traditional representationalism denied that external physical objects could be perceived, claiming that they were inferred from, or suggested by, the things we perceived, namely, ideas or sense-data. Modern representationalism allows that external physical objects can be perceived, but insists that they are perceived only indirectly in virtue of directly perceiving internal and private, non-physical objects.

While modern representationalism maintains that there are two distinct species of perceptual awareness, a direct awareness of internal non-physical objects and an indirect awareness of external physical objects, direct realism holds that there is only one

species of perceptual awareness, and that this single type of perceptual awareness takes external physical existents as its objects, rather than internal non-physical objects. Direct realists grant that we perceive external physical objects in virtue of having perceptual experiences, but they deny that perception involves being directly aware of these perceptual experiences, rather than being directly aware of the external physical objects themselves.

But there is scope for an alternative interpretation of indirect realism or representationalism, one which construes representationalism, not as the view that external physical objects are perceived only indirectly in virtue of directly perceiving intervening existents or objects, but rather as the view that none of the properties which characterize perceptual experience are intrinsic properties of external physical objects. Thus, Mundle regards representationalism as the thesis that "no sensible qualities are *intrinsic* properties of external physical objects."<sup>1</sup> Indirect realism or representationalism may then be viewed as the thesis that experienced or sensed colour and shape are never numerically identical with intrinsic colours and shapes of external physical objects. For Mundle, the direct realist's notion that perception is a direct confrontation with external physical objects is simply another way of saying that "sensible qualities are intrinsic properties of physical objects, implying, e.g., that when I see a tomato it is the tomato itself which is visibly red and round."<sup>2</sup>

On the proposed broader interpretation of representationalism, the minimum commitment of representationalism is the view that *none* of the sensible or experienced qualities are intrinsic properties of external physical objects, while the minimum commitment of direct realism is the view that *at least some* of the sensible or experienced qualities are intrinsic properties of external physical objects. The minimum commitment of representationalism is, therefore, not that there are two kinds of perceptual awareness, one direct and the other indirect, and that we perceive external physical objects only indirectly in virtue of directly perceiving internal non-physical objects, but rather that sensible or experienced qualities are never numerically identical with intrinsic properties of external physical objects.

Price observes that the "Causal Theory... 'bifurcates Nature' into sense-data on the one side and things on the other."<sup>3</sup> But nature is equally bifurcated by any causal theory of perception which distinguishes between phenomenal qualities *qua* content of perceptual experience and phenomenal qualities *qua* intrinsic properties of external physical objects. A veil of perception composed only of intervening qualities is just as

isolating from the external physical world as one composed of intervening existents or objects. The central idea behind representationalism, captured by, but not exclusive to, interpretations in terms of intervening perceptual existents or objects, is the notion that the mind is somehow confined, set apart from an external and public, physical reality which lies behind it. Armstrong explains that, according to the representationalist, "The mind is locked in behind its own sensory field, and it becomes hard to see how we could have any reliable knowledge of the physical world that allegedly lies beyond it."<sup>4</sup> Any theory of perception which insists that it is not, for example, the tomato itself which is visibly red and round will be representationalist in the proposed broader sense of the term.

Although there is admittedly little explicit support in the philosophical literature on perception for expanding the scope of representationalism, there are a few passages which at least suggest the need for a broader interpretation. Pitcher, for example, observes that the sense-datum theorist's "claim that sense-data are metaphysically distinct from anything in the physical world commits him to a version of representative realism."<sup>5</sup> This passage lends some support to the view that it is metaphysical or ontological distinction, rather than second-order awareness, which is the hallmark of representationalism. Since second-order awareness is a sufficient, but not necessary, condition of representationalism, an absence of second-order awareness does not entail an absence of representationalism.

On the proposed broader interpretation of representationalism, any duplication or bifurcation of reality into phenomenal properties *qua* perceptual experience and phenomenal properties *qua* intrinsic properties of external physical objects, such that the sensible characteristics of perceptual experience or perceptual consciousness are never numerically identical with intrinsic properties of external physical existents, will entail representationalism. Any postulation of metaphysically distinct internal and external phenomenal realms will be representationalist in the broader sense of the term.

To show that the causal theorist's common element thesis leads to representationalism, we have only to show *either*: (1) that the common element thesis entails *two types of perceptual awareness*, one which takes only internal existents and one which takes external existents, and that we are aware of external existents only indirectly in virtue of being directly aware of the internal existents which those external existents cause in us; or (2) that the common element thesis entails *two types of phenomenal property*, a phenomenal property *qua* characteristic of perceptual

experience and a phenomenal property *qua* intrinsic property of external physical objects, and that the sensible or experienced qualities are never numerically identical with intrinsic properties of external physical objects. The common element thesis will entail representationalism *either* by duplicating awareness or by duplicating the phenomenal realm.

To be sure, if there is no duplication of the relation of perceptual awareness, such that we are aware of external physical objects only indirectly in virtue of being directly aware of private non-physical objects or contents, then the account is not representationalist as traditionally construed. But there is room for expanding the notion of representationalism and examining current theories of perception in light of the revised concept. I have chosen to apply the revised concept of representationalism to the theories of perception offered by Hirst, Armstrong and Searle because Armstrong and Searle claim that their theories are direct realist, and thus deny that their accounts are representationalist, while Hirst claims to advance a modified version of representationalism which is free from the objectionable features of traditional representationalism. In the discussion which follows, I hope to show that Hirst, Armstrong and Searle are all committed to representationalism in an objectionable sense, a sense which bifurcates reality and isolates the percipient behind a wall of private and subjective, phenomenal qualities. But we cannot appreciate the representationalist implications in Hirst's, Armstrong's and Searle's theories of perception unless we recognize the broader interpretation of representationalism.

#### 4.2 The Case Against Hirst

On Hirst's double-aspect theory of perception, we perceive external physical objects by having perceptual consciousness caused in us by those objects. Perceptual consciousness can occur without an external physical cause, and can thus occur in the absence of appropriate, external physical existents. Perceptual consciousness is held to be the common element in hallucination and genuine perception, and hallucinatory and genuinely perceptual consciousness are held to be type-identical consciousness. The subjective indistinguishability of hallucinations and genuine perceptions is a function of the common perceptual consciousness which is the inner aspect of the "same (or similar) brain and nervous activity."<sup>6</sup> On the outer scientific aspect, the correlator's point of view, perceptual consciousness is strictly adverbial in structure, rather than act/object. Significantly, Hirst insists that we can never be perceptually conscious of external physical objects.<sup>7</sup> He cautions us that we must be careful "not to muddle perceptual

consciousness with perceiving or confuse the 'object' of the former, which is really a content, with the object of the latter, a public physical thing."<sup>8</sup> We perceive, but do not have perceptual consciousness of, external physical objects, and have perceptual consciousness of, but do not perceive, the adverbial sense-contents which those objects cause *in us*.

Hirst argues that "causal considerations" confirm that "sensible qualities, being in part the product of...subjective processes, are not intrinsic to external objects--they may correspond to them but are numerically and often qualitatively different."<sup>9</sup> He cautions that "the qualities of which the subject is perceptually conscious, *i.e.* the contents of this consciousness or its mental objects, must be distinguished in all perception from the intrinsic properties of physical objects, *i.e.* they are not numerically identical."<sup>10</sup> As a "quality of the content of perceptual consciousness," redness or roundness "will not be intrinsic to the object or really be a property of it at all."<sup>11</sup> Since the phenomenal properties of the perceptual consciousness involved in genuine perception can never be numerically identical with, but at best correspond to or correlate with, intrinsic properties of external physical objects, Hirst's account of perception and perceptual consciousness is representationalist in the proposed broader sense of the term.

Explicitly rejecting the common-sense view that "the colours and shapes that we see, and sounds, smells or warmth, are all intrinsic properties of external objects,"<sup>12</sup> Hirst warns that we must not "say that the red as we see it, as a part of the inner aspect, is an intrinsic property of the external object."<sup>13</sup> The properties of the content of perceptual consciousness correspond with intrinsic properties of external physical objects as mere "projections or transformations of them according to rule."<sup>14</sup> Hirst speaks of a "correspondence between tomato *qua* content of perceptual consciousness and tomato *qua* physical object and cause."<sup>15</sup> There is mere correspondence, and never an identity, between "the sensible qualities of the tomato, *qua* content of consciousness, and the intrinsic properties of the external tomato."<sup>16</sup> On Hirst's account, it is not the tomato itself which is visibly red and round.

Hirst acknowledges that his theory of perception is "in many ways" closer to representationalism than to common sense, and even refers to his theory as "an improved version of the Representative Theory."<sup>17</sup> His theory "has a basic similarity with the Representative Theory" since the content of perceptual consciousness is understood to "correspond with the external object perceived,"<sup>18</sup> rather than being numerically identical with intrinsic properties of the external object. Object shape "within



the content of perceiving" is regarded as only "isomorphic with the intrinsic real shape of the object,"<sup>19</sup> and not identical with the intrinsic real shape. Hirst freely admits that his talk of contents, rather than objects, of perceptual consciousness bears a certain resemblance to representationalism. There is an unmistakable representationalist flavour to Hirst's talk of going "beyond the content of an adverbial experience to establish intrinsic properties."<sup>20</sup> For representationalism just is the view that there is an external physical reality which lies beyond our perceptual experiences. Phenomenalism is the view that reality is in some sense composed of our perceptual experiences, while direct realism is the view that there is an external physical reality with which we are in direct perceptual contact, and thus an external physical reality which does not lie beyond our perceptual experiences.

Although Hirst's double-aspect analysis of perception in terms of adverbial sense-contents carefully avoids duplicating the relation of perceptual awareness, and thus avoids representationalism narrowly construed, he ends up duplicating the phenomenal realm, postulating two different types of phenomenal properties, those which characterize the contents of perceptual consciousness and those which characterize external physical objects. Anxious to avoid "having to postulate a second substance or order of being,"<sup>21</sup> he avoids distinguishing first-order and second-order awareness and objects at the expense of distinguishing first-order and second-order phenomenal properties. Mundle rightly accuses Hirst of attempting to render representationalism defensible by substituting "contents of perceptual consciousness" for representationalism's more traditional terms "ideas" or "sense-data."<sup>22</sup> But the substitution of contents for sense-data does not avoid representationalism if the properties of contents, like the properties of sense-data, can never be numerically identical with intrinsic properties of external physical objects. Russell rightly rejects the notion that "experience involves mental modifications called 'contents', having a diversity which reproduces that of objects."<sup>23</sup>

By resisting postulating two forms of perceptual awareness, Hirst believes that his double-aspect account of perception is not representationalist in an objectionable sense. But Hirst's theory of perception remains objectionably representationalist, despite his avoidance of second-order awareness, since the phenomenal properties of the content of perceptual consciousness are never numerically identical with intrinsic properties of external physical existents. Hirst wrongly assumes that the sole source of objectionable representationalism is a duplication of perceptual awareness, and its corresponding duplication of existents or objects. He fails to appreciate that

objectionable representationalism also results from a duplication of phenomenal properties.

Hirst's double-aspect theory of perception fully embraces the Cartesian notion that perceptual consciousness is not dependent for its occurrence or nature on events in the external physical world, that perceptual consciousness is immune to the non-existence of external physical reality. The presence or absence of external physical existents determines whether we perceive, but does not determine whether we have perceptual consciousness. Collins explains that, on the Cartesian view of hallucination, "The sensuous features of perceived objects...reappear as features of experiences themselves. The redness of the hallucinated apple is not repudiated along with the existence of the external object. The mental realm comes to contain a duplicate or parallel sensuous reality."<sup>24</sup> It is important to note that this "duplicate or parallel sensuous reality" need not be accompanied by a duplicate or parallel species of awareness, one which takes only internal objects, in order for the account to qualify as representationalist. The analysis will be representationalist broadly construed if the sensuous reality *qua* features of perceptual experience is never numerically identical with the sensuous reality *qua* intrinsic properties of external physical objects.

Hirst explains that the principal difficulty in representationalism

lies in its main conclusion, that we are never directly aware of external physical objects; strictly all our direct perception is of mental representations which, though they are supposed to be caused by and in part resemble external objects, are nevertheless quite distinct from them and form a private world for each percipient. The question then is: how does the percipient ever get out of this private mental world to which all his sensory awareness is confined?<sup>25</sup>

But we must not suppose that the only mental representations which would intervene between us and the external physical world are internal and private, non-physical existents or objects. Hirst's error is to assume that the representationalist difficulty arises only when the private data of experience are construed objectively, rather than adverbially. Sensible redness and roundness need not be instantiated or exemplified in inner non-physical existents or objects in order to constitute a veil of appearances. In denying that we are ever directly aware of external physical objects, and insisting that sensible qualities *qua* content of perceptual consciousness are never numerically identical to intrinsic properties of external physical objects, Hirst's double-aspect account of perception is representationalist broadly construed.

Hirst speaks, not simply of an adverbial experience *with* content, but also of "experienced content," and distinguishes "the awareness of the content from observing or perceiving of objects."<sup>26</sup> We thus perceive external physical objects, not simply by *having* adverbial sense-contents, but also by experiencing or being aware of these contents, at least on the inner aspect. Hirst believes that the fault of traditional representationalism was to construe the awareness of sense-contents as transitive or act/object, requiring a second order of private, non-physical objects of awareness. Hirst's improved version of representationalism dispenses with the transitive or act/object analysis of awareness of sense-contents, avoiding the epistemological difficulties involved in private mental objects like sense-data. Since Hirst's account does not maintain that the private adverbial sense-contents are themselves perceived, his double-aspect theory of perception is not representationalist narrowly construed. He does not maintain that we perceive external physical objects in virtue of perceiving the adverbial sense-contents which those objects cause *in* us.

But Hirst's double-aspect theory of perception is representationalist in the broader sense of the term since it holds that we perceive external physical objects in virtue of being perceptually conscious of numerically distinct qualities, and thus bifurcates reality into two distinct sensuous, phenomenal or qualitative realms. Although there is no intervening veil of second-order awareness of internal non-physical objects which instantiate or exemplify the internal and private, phenomenal qualities, there is still a veil of internal and subjective, sensuous qualities intervening between us and external and objective, sensuous reality. It matters little whether the veil of appearances consists of objects or contents. Purely subjective and private, experiential contents are in opposition to direct realism's notion of a direct experiential contact with external physical reality regardless of whether the contents are construed objectively in terms of sense-data or adverbially in terms of modes of sensing.

To the extent that adverbialists must justify claims about external physical objects by inferences from their adverbial sensings, their perceptual knowledge of external physical objects remains indirect and inferential even though they do not postulate intervening intermediary existents like sense-data.<sup>27</sup> Adverbialists like Hirst must make inferences from the sensible qualities to intrinsic properties of external physical objects. Robinson notes that, when perceptual experience is restricted to subjective experiential content, "modes of sensing," just as much as sense-data, can constitute a "'veil of perception' dividing us from the mind-independent world."<sup>28</sup>

Hirst believes that his double-aspect theory of perception is not objectionably representationalist because it does not postulate adverbial sense-contents as effects of unobservable, external physical objects. He states that we "can by measurement and calculation get beyond the content of an adverbial experience to establish intrinsic properties."<sup>29</sup> But surely this will amount to nothing more than formulating the best hypothesis to explain the agreement between the contents of perceptual consciousness for our various measurements? Without the capacity to confront the external physical world directly through perceptual consciousness, we will remain hopelessly isolated from the external physical world, with our perceptual experiences and their contents intervening between us and external physical reality.

Perceptual experiences can represent external physical objects without themselves or their contents being perceived, and thus without entailing perceptual representationalism narrowly construed in terms of two species of perceptual awareness. But the notion that we perceive external physical objects in virtue of being perceptually conscious of private and subjective, adverbial sense-contents is representationalist broadly construed in terms of a bifurcation of phenomenal reality into qualities *qua* content of consciousness and qualities *qua* intrinsic properties of external physical objects. Even if there is only one relation of perception, and thus an absence of representationalism construed in terms of two types of perceptual awareness, there will still be a wholesale non-identity of visible colour and shape and intrinsic colour and shape of external physical objects, and thus a representationalist duplicate or parallel phenomenal realm. The notion that visible colour and shape are of an altogether different category than the intrinsic colour and shape of external physical objects is representationalist broadly construed. Russell regards sense-data as "signs of the existence of something independent of us and our perceptions."<sup>30</sup> Hirst's adverbial sense-contents are at best signs of what lies beyond perceptual consciousness, and are therefore just as representationalist as sense-data, even though they are not private inner *objects*.

#### 4.3 The Case Against Armstrong

On Armstrong's belief-based reduction of perception, perceiving just is being caused to acquire beliefs or inclinations to believe things about the existence and properties of external physical objects by the action of those objects on the sense organs. Believing that the biological function of perception is to provide the percipient with information about the current state of the environment, he concludes that perception is "nothing but"

the acquisition of true or false beliefs about the environment.<sup>31</sup> The directness of perception is the immediacy of the acquired beliefs, and the beliefs are immediate in the sense of not being the result of any inference or suggestion. Armstrong insists that perceptual experiences have only propositional representational properties, rejecting irreducibly phenomenal or qualitative properties of perceptual experience, or qualia.

As a functionalist, Armstrong offers a purely relational characterization of mental states like perceptual experiences in terms of inputs, outputs, and relations to other mental states. Whatever plays the causal role of a perceptual experience just is a perceptual experience. On Armstrong's causal theory of the mind, perceptual experiences are reduced to immediate acquirings of perceptual beliefs about the external physical world, and perceptual beliefs are analysed as states which are both apt to bring about discriminatory behaviour towards the physical environment and apt to be brought about by states of affairs in the physical environment.<sup>32</sup> Neutral monists can be regarded as early functionalists since, like Armstrong, they believed that relational organization wholly accounted for mental states being the states they happened to be. The principal difference between functionalists and neutral monists seems to be that neutral monists did not place as much emphasis on *causal* relations.

For Armstrong, perceptual experiences are neither the basis for perceptual judgments nor phenomenological accompaniments of perceptual judgments, but instead just are acquirings of perceptual judgments about the external physical world.<sup>33</sup> Since perceptions just are our apprehensions of external physical reality, rather than the ground for our apprehensions, they do not stand between us and the external physical world. But Hirst observes that perceiving cannot be judging because many perceptions, such as our perception of the Müller-Lyer figure, are not amendable in light of knowledge of new facts.<sup>34</sup> No matter how much we subsequently learn, and thus come to believe, the Müller-Lyer lines continue to look unequal in length. Perceptions cannot be judgments because they are not revisable in the face of new evidence, and so do not behave like judgments.

Armstrong insists that, when we suffer auditory hallucination and when we genuinely perceive an actual noise, our "perceptual experience will be absolutely identical in both cases."<sup>35</sup> On Armstrong's version of the common element thesis, hallucinations and genuine perceptions are the very same experience because they both consist in the acquisition of groundless beliefs or inclinations to believe. Hallucinations are distinguished from genuine perceptions by the fact that the belief states in



hallucination are not produced by stimulation of the sense organs, and the beliefs which are acquired are false. Sensory illusion is simply the flow of false beliefs or misinformation about the environment. The acquisition of beliefs or inclinations to believe, whether true or false, is regarded as a wholly inner mental event.

By reducing perceptual experiences to sense-impressions analyzed in terms of the acquisition of beliefs or inclinations to believe, Armstrong effectively abandons *experiential* awareness of external physical existents. He reduces sensational properties of experience to the acquisition of beliefs or inclinations to believe. The phenomenal sense of "looks" is reduced to the epistemic use, what we would judge *to be* the case in the absence of countervailing beliefs. In discussing Armstrong's belief-based reduction of perceiving, Ziedins remarks that any direct realism "which seeks to correlate acquisition of beliefs with physiological events, making no use of perceptual experiences, has one important feature in common with the Representative Theory. Both theories turn physical existents into things-in-themselves of which we are never experientially aware."<sup>36</sup>

On Armstrong's theory of perception, we are never experientially aware of external existents and their properties, but instead directly acquire beliefs *about* them by means of our senses. He insists that our beliefs about the physical world, unlike the representationalist's sense-impressions, do not stand between us and external physical reality. Yet, since beliefs themselves cannot *be* coloured or shaped, they can at best be *about* colours or shapes, and so can at best *correspond to*, or *correlate with*, colours and shapes. As propositional attitudes, beliefs consist of *concepts* of colour and shape, and not instantiated colours and shapes themselves.

Because the content of beliefs is propositional in structure, beliefs about redness are actually beliefs about *facts* involving redness. We do not simply believe *that* red, but instead believe *that* such and such *is* red or *is* red looking. Armstrong concedes that, on his account, perception is "essentially judgmental" since perceiving always takes "a fact about the world"<sup>37</sup> as its object. Facts are not *identical to* items and properties in the external physical world, but are instead *about* items and properties in the external physical world. Since perception takes facts *about* the world, rather than the world itself, as its object, and since facts are never identical with items in the world, the content of perception can never be numerically identical with intrinsic properties of external physical objects. Since perceptual facts are never identical with the items in the world about which they are facts, intrinsic properties of external physical objects can never be

constituents of perceptual content. Armstrong's analysis is representationalist in the broader sense of the term because it divorces the content of perception, which consists of facts about the external physical world, from intrinsic properties of external physical objects.

Armstrong believes that, if we accept the existence of perceptual experiences, then "we are saddled with the insuperable problems either of the representative theory of perception, or of phenomenalism."<sup>38</sup> While phenomenalism identifies physical reality with our experiences of that reality, representationalism views physical objects and their properties as "something distinct from our experiences."<sup>39</sup> But since he reduces experiences to acquisitions of beliefs or inclinations to believe, and since beliefs are not themselves physical objects and their properties, but are instead *about* physical objects and their properties, Armstrong's own account of perception makes physical objects and their properties "something distinct from our experiences," and is therefore representationalist in his own sense of the term.

The root of Armstrong's difficulties is his mistaken assumption that perceptual experience entails sense-impressions construed as existent, but non-physical, objects. Armstrong explains that he is unable to see how to reconcile "the notion of perceptual experience as something quite distinct from the acquiring of beliefs about the environment" with a causal analysis of the concept of perception "which does not involve non-physical sensory items."<sup>40</sup> He thus believes that the admission of perceptual experiences which are not reducible to acquisitions of beliefs, together with a commitment to the causal theory of perception, entails the admission of non-physical sensory items. Since he believes that non-physical sensory items would themselves be "perceived items or objects,"<sup>41</sup> and thus entail either phenomenalism or representationalism, Armstrong chooses to deny that the acquisition of perceptual beliefs is based upon distinct perceptual experiences, insisting that perceptual experiences are *nothing but* acquisitions of beliefs about the environment. But the admission of perceptual experiences which are not reducible to beliefs or inclinations to believe in no way entails the admission of non-physical sensory items which would themselves be objects of perception. Perceptual experiences need not be perceived items simply because they are irreducible to beliefs.

#### 4.4 The Case Against Searle

While Armstrong reduces perceptual experiences to the acquisition of beliefs or inclinations to believe, and regards perceptual content as the content of the beliefs or inclinations to believe which we have acquired by means of our senses, Searle accepts perceptual experiences, and maintains that perceptual content is a function of the content of perceptual experience. For Searle, intentionality is an intrinsic property of mental states and events by which they are directed at or about objects and states of affairs in the world, objects and states of affairs which need not even exist.<sup>42</sup> Since he believes that perceptual experiences are intrinsically intentional, and since intentional content is always propositional in structure, specifying a whole state of affairs in the world, Searle concludes that all perceiving is perceiving *that* such and such is the case in the world.<sup>43</sup>

While Peacocke analyses the representational content of perceptual experiences in terms of what we *would judge*, taking our experiences at face value and in the absence of countervailing beliefs, Searle analyses the representational content of our perceptual experiences in terms of what we *would believe* in the absence of overriding beliefs.<sup>44</sup> The representational content of a perceptual experience determines a set of conditions of satisfaction for the experience.<sup>45</sup> One can have a perceptual experience without perceiving since one can have an experience with propositional representational content but no object.<sup>46</sup> In hallucination, nothing satisfies the referential portion of the representative content, so the intentional state has no intentional object.<sup>47</sup>

Since Searle believes that perceptual experiences are intrinsically intentional, and thus possess their propositional representational content regardless of whether anything answers to, or satisfies, the intentional content of the experiences, the propositional representational content of perceptual experiences becomes the common element in hallucination and genuine perception. For both Armstrong and Searle, hallucinations and genuine perceptions have propositional representational contents in common. Subjectively indistinguishable hallucinatory and genuinely perceptual experiences are regarded as the very same experience because they represent the very same states of affairs in the external physical world.

Wrongly believing that propositional representational content is intrinsic to perceptual experiences themselves, Searle concludes that many perceptual experiences are not possible without mastery of certain background skills, such as linguistic skills.<sup>48</sup>

But surely it is perceiving *that*, perceiving *as being* or perceiving *to be* which is not possible without certain background skills, and not the having of perceptual experiences themselves. Similarly, it is not the character of perceptual experience itself which is affected by the content of our beliefs,<sup>49</sup> but rather the character of our perceptual experiences *that*. Physical objects do not *phenomenally* look different depending upon the beliefs we have about them, but rather look *to be* different. It is not our perceptual experiences themselves which change, but rather our experiences *that*.

Searle is an internalist in believing that perceptual experiences are both independent of and intentionally related to their objects. Like Armstrong, he believes that perceptual content is always propositional in form. As intrinsically intentional phenomena, perceptual experiences essentially represent *that* such and such is the case in the external physical world. The content of a perceptual experience is, not the way that a physical object and its properties are represented, presented or given in experience, but rather the way that a physical object and its properties are represented, presented or given in the experience *as being*.

Since perceptual experiences can represent external physical existents without being objects of perception, and since perceptual experiences can have representational contents without being directed at or about the representational contents, Searle believes that perceptual experiences can have a representational content without being perceptually representational.<sup>50</sup> Unlike naive realism, both phenomenalism and representationalism treat perceptual experiences themselves as the objects of perception. If perceptual experiences are not the objects of perception, then no representationalism results. In maintaining that we perceive if and only if our perceptual experiences are appropriately caused by external physical objects, Searle advances what he regards as a noninferential, naive realist version of the causal theory of perception.<sup>51</sup>

Searle cautions us that, once we treat the content of perception as its object, something like phenomenalism or representationalism "seems inevitable."<sup>52</sup> He believes that perceptual experiences would themselves have to be objects of perception in order to stand between us and the external physical world. Since his intentional theory of perception does not maintain that we perceive our perceptual experiences, Searle concludes that his theory of perception is not representationalist. But I believe that perceptual experiences stand between us and the external physical world if the contents of our perceptual experiences are never numerically identical with intrinsic properties of external physical objects, but are instead facts *about* intrinsic properties of

external physical objects. Like Armstrong, Searle maintains that perceptual content is, not physical objects and their properties themselves, but rather facts *about* physical objects and their properties. Since perception takes facts *about* external physical reality, rather than external physical reality itself, Searle's account is just as representationalist as Armstrong's account of perception.

As materialists, Hirst, Armstrong and Searle all seek to provide a naturalistic account of perceptual content. Where perceptual experiences are identified with brain activity, or reduced to acquirings of beliefs or inclinations to believe which are themselves identified with brain activity, perceptual experiences are located wholly within the percipient. McGinn points out that "identifying the mind with the brain, and mental states with brain states, conflicts with externalism, since the brain really does lie literally within the head."<sup>53</sup> Hirst, Armstrong and Searle are all internalists about perceptual content to the extent that they identify mental phenomena like perceptual experiences with states of the brain. As internalist causal theorists about perception, Hirst, Armstrong and Searle all sever perceptual experiences from the external physical world. For Hirst, perceptual consciousness always takes private mental contents. For Armstrong, perceptual experience is reduced to the inner event of the acquisition of beliefs or inclinations to believe things *about* the external physical world. For Searle, perceptual experience is always an inner mental representation *that* such and such is the case in the world. For Hirst, Armstrong and Searle, the content of our perceptual experiences is intrinsic to those experiences, and is thus not dependent upon or determined by factors in the physical environment. By divorcing the content of perceptual experiences from intrinsic properties of external physical existents, Hirst, Armstrong and Searle have all built representationalism broadly construed into their accounts of perception.



- 1 C.W.K. Mundle, "Common Sense Versus Mr. Hirst's Theory of Perception," *Proceedings of the Aristotelian Society* 60 (1959-60), p. 62.
- 2 *Ibid.*, p. 69.
- 3 H.H. Price, *Perception*, London: Methuen & Co. Ltd., 1950, p. 214.
- 4 D.M. Armstrong, *A Materialist Theory of the Mind*, London: Routledge & Kegan Paul Ltd., 1971, p. 241.
- 5 George Pitcher, *A Theory of Perception*, Princeton: Princeton University Press, 1971, p. 63.
- 6 R.J. Hirst, *The Problems of Perception*, New York: Humanities Press Inc., 1978, p. 312.
- 7 R.J. Hirst, "Philosophical Conclusions," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 329.
- 8 Hirst, *The Problems of Perception*, p. 295.
- 9 R.J. Hirst, "A Reply To Professor Mundle," *Proceedings of the Aristotelian Society* 60 (1959-60), p. ii.
- 10 Hirst, "Philosophical Conclusions," p. 333.
- 11 Hirst, *The Problems of Perception*, p. 315.
- 12 *Ibid.*, p. 314.
- 13 *Ibid.*, p. 316.
- 14 *Ibid.*, p. 297.
- 15 *Ibid.*, p. 295.
- 16 *Ibid.*, p. 298.
- 17 R.J. Hirst, "Sense-Data and Common Sense," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 292.
- 18 Hirst, *The Problems of Perception*, p. 295.
- 19 *Ibid.*, p. 319.
- 20 *Ibid.*, p. 317.

- 21 *Ibid.*, p. 196.
- 22 Mundle, "Common Sense Versus Mr. Hirst's Theory of Perception," pp. 66-7.
- 23 Bertrand Russell, *Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984, p. 44.
- 24 Arthur W. Collins, *The Nature of Mental Things*, Notre Dame: University of Notre Dame Press, 1987, p. 11.
- 25 R.J. Hirst, "Scepticism and the Representative Theory," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 253.
- 26 Hirst, "Philosophical Conclusions," p. 327.
- 27 James W. Cornman, "On Direct Perception," *Review of Metaphysics* 26 (1972-73), p. 40.
- 28 Howard Robinson, "The General Form of the Argument for Berkeleian Idealism," in *Essays on Berkeley: A Tercentennial Celebration*, John Foster and Howard Robinson (eds.), Oxford: Clarendon Press, 1988, p. 173.
- 29 Hirst, *The Problems of Perception*, pp. 316-7.
- 30 *Ibid.*, p. 13.
- 31 Armstrong, *A Materialist Theory of the Mind*, p. 209.
- 32 *Ibid.*, p. 339.
- 33 *Ibid.*, p. 226.
- 34 R.J. Hirst, "Perceptual Consciousness," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 304.
- 35 D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, p. 27.
- 36 R. Ziedins, "Knowledge, Belief and Perceptual Experiences," *Australasian Journal of Philosophy* 44 (1966), pp. 87-8.
- 37 D.M. Armstrong, "A Theory of Perception," in *Scientific Psychology: Principles and Approaches*, Benjamin B. Wolman (ed.), New York: Basic Books, Inc., 1965, p. 490.
- 38 *Ibid.*, p. 502.
- 39 *Ibid.*
- 40 Armstrong, *A Materialist Theory of the Mind*, p. 217.

41 *Ibid.*, p. 221.

42 John R. Searle, *Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987, p. 1.

43 *Ibid.*, p. 40.

44 *Ibid.*, p. 56.

45 *Ibid.*, p. 12.

46 *Ibid.*, p. 38.

47 *Ibid.*, p. 17.

48 *Ibid.*, p. 54.

49 *Ibid.*, p. 55.

50 *Ibid.*, pp. 17, 44.

51 *Ibid.*, p. 74.

52 *Ibid.*, p. 60.

53 Colin McGinn, *Mental Content*, Oxford: Basil Blackwell Ltd., 1991, p. 15.

## Chapter 5

### Intrinsic Looks, Time-Lags, and Strong Externalism

#### 5.1 Perceptual Relativity and the Selective Theory of Perceptual Content

Various perceptual phenomena and illusions are widely believed to pose insuperable difficulties for the direct realist's notion of a direct contact or confrontation with external physical objects. Perceptual relativity, the bent-stick illusion and time-lag cases are all thought to challenge the direct realist's notion of an immediate confrontation with external physical reality. In this chapter, I attempt to sketch the direction of a plausible direct realist analysis of these perceptual phenomena and illusions. I account for these phenomena and illusions in terms of the direct perception of external and public, physical *appearances*. In the bent-stick and time-lag cases, I maintain that these physical appearances are spatially and temporally isolated causal descendants of external physical objects. As external public existents, these causal descendants preserve the direct realist's notion of a direct contact with external physical reality, thereby avoiding having to admit private non-physical objects of perception. The three arguments against direct realism which I will examine, the argument from perceptual relativity, the argument from perceptual illusion and the argument from time-lags, can all be adequately addressed by postulating the direct perception of external and public, physical appearances which, in the bent-stick and time-lag cases, are causal descendants of external physical objects. I will apply the notion that we can perceive causal descendants of external physical objects to McGinn's Twin Earth-inspired argument against strong externalism about perceptual content, thereby defending the proposed modified disjunctivism about experience.

In the argument from perceptual relativity, it is claimed that what we directly perceive varies with differences in our location and physical and psychological conditions of observation, but physical objects themselves do not vary with mere differences in our location and physical and psychological conditions of observation, so what we directly perceive cannot be identified with physical objects themselves, but must instead be identified with non-physical objects like sense-data. The direct or immediate object of perception is qualitatively different from, and thus not identical to, any external physical object before us, so what we directly or immediately perceive is not an external physical object, but instead a non-physical object like a sense-datum. In

the case of viewing a penny from different perspectives, what we directly see is both round and elliptical, but the penny itself cannot be both round and elliptical, so what we see cannot be identified with the penny itself, but must instead be identified with private non-physical existents which are round and elliptical.

Representationalism is a *generative* theory about perceptual content, insisting that the roundness and ellipticity in the penny example are generated by our own central nervous system.<sup>1</sup> On the generative theory, perceptual relativity is explained in terms of differences in subjectively generated content. Direct realism is a *selective* theory of perceptual content, maintaining that the roundness and ellipticity in the penny example are selected from properties of the penny itself, not generated by our central nervous system. On the selective theory, perceptual relativity is explained in terms of a selection of different properties of external physical objects. As a direct realist, I am committed to a selective, rather than generative, theory of perceptual content.

But traditional versions of the selective theory are plagued by an implausible view of the intrinsic properties of external physical objects. Mundle, for example, believes that we can reconcile the selective theory with common sense if we "recognise the logic of ascriptions of sensible qualities which is the natural corollary of the Selective Theory."<sup>2</sup> On Mundle's version of the selective theory, perceptual relativity is explained in terms of a selection from incompatible intrinsic properties of physical objects. Mundle encourages us to reject the assumption that physical objects have only one shape, colour, etc., and to maintain instead that physical objects have "an indefinite number of determinate shapes and colours."<sup>3</sup> On his version of the selective theory, "one intrinsic property of the ('really' white) wall-paper is being-yellow-to-people-suffering-from-jaundice."<sup>4</sup> Anticipating Mundle, Baylis argues: "Why not insist...that the object has as many colours as it can be seen to have?"<sup>5</sup> But perceptual relativity cannot plausibly be explained in terms of a selection of incompatible intrinsic colours and shapes of physical objects. White wall-paper cannot be both intrinsically white and intrinsically yellow. However, white wall-paper can be both intrinsically white looking and intrinsically yellow looking. Jaundiced percipients simply select from the intrinsic yellow look of the intrinsically white wall-paper.

Hirst rejects the direct realist's selective theory in favour of the representationalist's generative theory because, on traditional versions of the selective theory's defense of common sense, such as that offered by Mundle,



The relativity of perception is...explained by saying that the public external object possesses all the various properties we perceive in it, e.g. the table possesses not only a round shape but an elliptical one, the mountains have a blue colour as well as a green one, etc., and the percipient selects one of these; which one he selects depends on his position, the distance and media, the state of his sense organs, and so on.<sup>6</sup>

On the selective theory's account of perceptual relativity, "there is self-contradiction as well as queerness....For there to be selection of qualities a table must be both round and elliptical, which is a self-contradiction; if it is round its diameters are equal, if it is elliptical they are not, so how can it be both?"<sup>7</sup> The solution to Hirst's problem is to recognize that, while we cannot select from incompatible intrinsic shapes and colours of objects, we can select from incompatible intrinsic looks of objects. Although we cannot select intrinsic ellipticity from a table which is intrinsically round, we can select an intrinsically elliptical look from a table which is intrinsically round.

Traditional versions of the selective theory implausibly hold that external physical objects literally possess each of the properties that we perceive in them and that the purpose of the sense organs is to select from these incompatible intrinsic properties of external physical objects. The problem with traditional versions of the selective theory is that they confuse intrinsic shapes and colours of objects with their intrinsic looks. If this confusion is avoided, then the direct realist need not explain perceptual relativity in terms of a selection of incompatible intrinsic properties of objects.

Hirst finds the selective theory self-contradictory because traditional versions of the theory explain perceptual relativity in terms of our making "different selections from the intrinsic qualities"<sup>8</sup> of physical objects. While we cannot select from incompatible intrinsic shapes and colours of physical objects, we can select from incompatible intrinsic looks of physical objects. Although Hirst's table cannot be both intrinsically round and intrinsically elliptical, it can be both intrinsically round looking and intrinsically elliptical looking. If we select, not from the table's intrinsic roundness or intrinsic ellipticity, but rather from its intrinsic round look or intrinsic elliptical look, the selective theory's explanation of perceptual relativity need not be paradoxical. Since a modified selective theory is not committed to explaining perceptual relativity in terms of a selection from incompatible intrinsic properties of physical objects, we are not compelled to embrace Hirst's representationalist generative theory of perceptual content.

The various psychological factors influencing perceptual content, such as expectation, learning and attention, fall under the general category of perceptual

relativity, and are equally thought to rule out the common-sense realist's notion of a simple direct contact with external physical reality. But a common-sense realist can accept the various psychological factors influencing perceptual content and deny that perception is a *simple* confrontation with external physical reality without having to abandon the idea that perception is a *direct* confrontation with that reality. The fact that perception is a more complex activity than is supposed by naive realism does not entail that perception is a more *indirect* activity.

## 5.2 Intrinsic Looks As Looks To Perspectives In Space

Hirst explains that advocates of the selective theory speak of intrinsic but relational properties of physical objects. He objects that, "If a thing's shape is its intrinsic property, then it possesses that shape objectively and quite independently of any observer."<sup>9</sup> However, we must distinguish between (1) having a shape relative to a perspective in space, (2) having a shape relative to another object, and (3) having a shape relative to an observer. Identifying "literally" and "intrinsically," Ayer distinguishes two broader senses of "intrinsic property."<sup>10</sup> In one sense of "intrinsic property," a property is intrinsic to an object if and only if the object possesses the property independently of its relations to *other objects*. But in another sense of "intrinsic property," a property is intrinsic to an object if and only if the property is ascribable to the object without reference to an *observer*. Elsewhere, Ayer speaks of a property being intrinsic to an object only if "it can be adequately defined without reference to the effects of the object upon an observer."<sup>11</sup>

I regard the elliptical look of the penny as an intrinsic property of the penny because it is definable, or ascribable to the penny, without reference to actual or possible observers. In order to define the elliptical look, or ascribe the elliptical look to the penny, we have only to appeal to the penny's location in space. The elliptical look of the penny is not intrinsic to the penny in the narrow sense of being wholly non-relational, for it is relative to the penny's location in space and incident light. But the elliptical look of the penny is intrinsic to the penny in Ayer's second broader sense of "intrinsic," for it is not relative to any actual or possible observers. The intrinsic elliptical look of the penny is the look it has to certain perspectives in space given its own location in space, regardless of whether there are any actual or possible observers. The ellipticity of the penny is an essential property of the penny given the laws of optics and perspectives.

Stainsby implausibly maintains that, in the case of the penny, "The elliptical shape comes into being only by our telescoping of the third dimension, by treating the farther edge of the coin as if it were level with the nearer edge."<sup>12</sup> I believe that the penny is intrinsically elliptical looking to certain perspectives in space regardless of whether there is an observer there to telescope the third dimension. Even if there were no observer present to telescope the third dimension, a penny would still, for example, cast elliptical shadows to certain perspectives in space. The penny's casting shadows to certain perspectives in space is intrinsic to the penny in the sense of being relative only to its location in space and the location of the ambient illumination, and not relative to observers.

While a penny cannot be both intrinsically round and intrinsically elliptical, it can be both intrinsically round looking and intrinsically elliptical looking. To say that the penny is intrinsically elliptical looking is merely to say that its public and objective appearance to certain perspectives in space is elliptical. Since the elliptical appearance of the penny is identified, not simply with the round surface of the penny, but rather with the interaction between the round surface of the penny and incident light, no difficulty arises concerning the ascription of incompatible properties to the penny. Direct realism can adequately account for perceptual relativity in terms of a selection from incompatible intrinsic looks of physical objects without having to postulate a selection from incompatible intrinsic shapes and colours of physical objects. Since the selective theory of perceptual content is not, after all, committed to the implausible doctrine of incompatible intrinsic properties of physical objects, we are not compelled to embrace the representationalist generative theory of perceptual content.

### 5.3 Perceptual Illusions, Causal Descendants, and Objective Appearances

Anxious to avoid committing what Chisholm refers to as the "sense-datum fallacy," to infer from the fact that S perceives an X which appears F to S that S perceives an appearance which is F,<sup>13</sup> many philosophers of perception attempt to account for perceptual illusions in terms of subjective appearings rather than objective appearances. Armstrong argues that to acknowledge objective bent-stick and distant-star appearances is "to complicate our account of physical reality."<sup>14</sup> While talk of appearings rather than appearances is plausible for perceptual illusions which are private and idiosyncratic of human perceptual processing, such as Benham's colours and the Müller-Lyer illusion, it is implausible for perceptual illusions which are publicly observable and not dependent for their occurrence upon being perceived, such as the bent-stick illusion. While there

need not be anything unequal in length in the Müller-Lyer illusion, and we can plausibly speak of unequal subjective appearing, rather than unequal objective appearances, there surely just is something which is bent in the bent-stick illusion, a bent-ness which does not depend upon being perceived and which is not a quirk of the human perceptual system. Philosophers of perception have been reluctant to admit illusory objective appearances because they thought that such an admission committed the sense-datum fallacy, illegitimately reifying appearings into appearances. While common sense rejects any wholesale reification of appearings into appearances, it recognizes that at least some illusory appearing must be accounted for in terms of illusory, objective and public appearances.

The error of the sense-datum theory was to suppose that all appearing, both subjective and objective, entails appearances construed as private non-physical existents which bear any apparent properties, so that when Müller-Lyer lines subjectively appear unequal in length to a percipient, there must be a mental existent which really is unequal in length. But the fact that it would be improper in the Müller-Lyer illusion to reify subjective unequal appearing into subjective unequal existents does not entail that there is never any justification for speaking of appearances as mind-independent existents, that any talk of objective physical appearances is misguided. Like many philosophers of perception, Barnes denies that there are such things as appearances, preferring instead to speak in terms of appearings.<sup>15</sup> He rightly accuses sense-datum philosophers of turning every appearance into an existent. But the objectivity and publicity of certain looks or appearances of physical objects to perspectives in space requires at least some objective existent appearances, and not simply objective appearings.

As many philosophers of perception have observed, any plausible analysis of perceiving must account for perceptual illusions. But Fodor and Pylyshyn begin at far too epistemological a starting point when they argue that "the problem for a theory of misperception is to explain how things could be taken to have properties that in fact they do not have."<sup>16</sup> Direct realists must attempt to provide an analysis of perceptual illusion which does not assume an epistemic account of perception. The following analysis of the bent-stick and time-lag illusions is intended to be a rough sketch of a non-epistemic analysis of certain varieties of perceptual illusion which have traditionally been thought to pose insuperable difficulties for the direct realist's notion of a direct contact or confrontation with external physical objects. The merit of the analysis is that it does not assume at the outset that perception is essentially cognitive or epistemic, and so does not construe perceptual illusion in terms of mis-taking things to be the case.

In the bent-stick and time-lag cases, causal descendants of the stick and distant stars causally interact with the surface of the water and the Earth's atmosphere to produce appearances. These appearances are external and public, physical existents which have many of their apparent properties. In the distant star case, the flickering which we see is a flickering of the interaction between light from the distant star and the Earth's atmosphere, and not a flickering which is occurring at the surface of the star itself or a flickering in our own minds. But it is widely believed that, while we can see things which either emit or reflect light, we cannot see light itself. An account of the bent-stick and time-lag cases in terms of seeing light from sticks and distant stars is challenged by the view that light itself is invisible. But the fact that we can see lightning, lasers, the discharge of static electricity, friction sparks, and the arc of electrical discharge between poles in a sealed vacuum tube shows clearly that we can see light itself, and not just things which either emit or are illuminated by light. Since light itself can be seen, the bent-stick and time-lag cases are plausibly explained in terms of seeing light from the sticks and distant stars, rather than seeing the sticks and distant stars themselves.

In ordinary perception, we directly perceive visual, auditory and tactual appearances which are literal parts or aspects of external physical objects. But in the bent-stick and time-lag cases, we directly perceive, not the external physical objects themselves, but rather their causal descendants, namely, external and physically existent appearances. No veil of appearances intervenes between us and external physical reality since what we directly perceive in these cases just is external physical reality, albeit external physical existents rather than external physical objects.

#### 5.4 The Bent-Stick Illusion

In the argument from the bent-stick illusion, it is claimed that what we directly perceive is bent, but the stick half-immersed in water is straight, so what we directly perceive is not the stick itself, but rather a private non-physical object like a sense-datum. Since what we directly perceive is bent, what we directly perceive cannot be identified with the straight stick itself, but must instead be identified with a private non-physical existent which really is bent.

Like many philosophers of perception, Hirst believes that talk of objective and public, physical appearances is an unnecessary and illegitimate reification of appearances into appearances. He speaks of seeing a stick refracted in water, rather than seeing a



bent-stick appearance. But it is clear that, as public, even photographable, phenomena, bent-stick appearances are hardly to be compared with the "unsuspected and unnecessary existents"<sup>17</sup> of the sense-datum theory. At least some perceptual illusions must be accounted for in terms of objective physical appearances which are not identifiable with intrinsic properties of external physical objects, but are instead causal descendants of those objects. While Hirst is right to attack the wholesale multiplication of entities in the sense-datum theory, he does not allow sufficient scope for objective and public appearances like the bent-stick appearance. The fact that we can trace the lower portion of the bent-stick appearance without thereby tracing the outline of either the submerged portion of the stick itself or the surface of the water suggests that we are picking out something in the world with our finger which is distinct from, albeit causally dependent upon, both the stick itself and the water. This distinct, but causally dependent, thing which we pick out with our finger is what I mean by the "bent-stick appearance." The bent-stick appearance is an existent of a different order from either the stick itself or the water.

Hirst asks: "Can one admit an unperceived appearance? When speaking of an appearance must we not be held to refer some thing appearing to some observer?"<sup>18</sup> The sort of thing which I mean by a "bent-stick appearance" is not dependent for its existence or nature on an observer, or someone to whom the stick is said to appear. The bent-stick appearance is causally dependent upon the immersed portion of the stick, the water, the air which lies above the surface of the water, the light which enters and is then refracted by the water, etc. But the thing in the world whose outline we can trace with our finger without thereby tracing the outline of either the stick itself or the surface of the water is not causally dependent upon the existence of an observer. In at least the bent-stick illusion, I believe that we can and must admit unperceived appearances.

Arthadeva suggests that we solve the problem of refraction by summoning "the courage to qualify our seeing and distinguish it into different kinds."<sup>19</sup> Rather than accounting for the bent-stick illusion in terms of perceiving causal descendants of the immersed portion of the stick, he claims that

The stick does not look its real shape when seen partly in air and partly in water, not because it has changed or its shape has changed: nor yet because in the water we do not see the real portion of the stick but an image a few inches above it. The stick does not look its real shape because we differently see the two parts of the stick: our seeing of one part is of a different kind from our seeing of the other.<sup>20</sup>

But the postulation of two distinct species of perceiving in the bent-stick illusion, one which takes the part of the stick in the air and the other which takes the submerged portion of the stick, has no explanatory value if we are not offered an account of the relation between the two species of perceiving. How, for example, are the two species of vision integrated into one visual field, and why, exactly, can we not perceive the submerged portion of the stick with the same species of perception which we use to perceive the part of the stick in the air? An explanation of the bent-stick illusion in terms of the perception of physical causal descendants of the stick can at least account for the relation between the stick and its causal descendants in terms of recognized nomic relationships. In the bent-stick illusion, we do not see the immersed portion of the stick itself, but instead see a differently located, physical causal descendant of the stick whose existence and nature is nomically dependent upon the existence and nature of the submerged portion of the stick.

Arthadeva's adverbial analysis of the bent-stick illusion does not do justice to the objective and public, bent look or appearance of the stick, the fact that it looks or appears bent, not just to percipients or other objects, but also to perspectives in space. Analysing the bent-stick illusion adverbially in terms of sensing in a bent manner does not capture the sense in which the bent look or appearance of the stick is not peculiar to percipients and their perceptual systems and not dependent for its occurrence on the existence of observers.

## 5.5 The Time-Lag Cases

In the time-lag argument, it is claimed that, because of the finite speed of transmission of light, sound, nervous impulses, etc., what we directly perceive cannot be identified with contemporaneous events in the external physical world, but must instead be identified either with the past or with contemporaneous, internal non-physical objects like sense-data. Due to the finite speed of light, it takes years for light to travel from distant stars to Earth. So what we directly see cannot be identified with contemporaneous events on distant stars, but must instead be identified either with past events on those stars or with contemporaneous events in our own minds. Since it is possible that some of the stars which we naively assume we are seeing have already ceased to exist, we actually see the past, seeing the way those stars were many years ago, and not the way they are at this very moment. But since all vision involves the transmission of light, and since all light travels at a finite speed, it is alleged that even those objects very near to us, such as tables and chairs, cannot strictly be seen as they

are at the time of the perception. What we really see is the way those tables and chairs were a fraction of an instant earlier, and not the way that they are at this very instant. The time-lag argument against direct realism concludes that the direct objects of perception can never be identical to contemporaneous, external physical objects, and so perception cannot be a direct contact with external physical reality.

Faced with the time-lag argument against direct realism, philosophers generally claim that we see either (1) the past itself, or (2) a private non-physical object such as a sense-datum. They wrongly assume that we are faced with a dilemma: if we maintain that the objects of perception are contemporaneous with the perceiving, then we must accept that they are private, rather than public; but if we hold that the objects of perception are public, then we must accept that they are now past. They believe that the price for maintaining the publicity assumption is the perception of the past, while the price for maintaining that the objects of perception are contemporaneous with the perceiving is the perception of private non-physical existents. But we can preserve the publicity assumption for perception without being committed to the perception of the past if we recognize that we can perceive causal descendants of distant objects like stars.

Ayer believes that we must "balance the oddity of saying that we can see what is past against the oddity of saying that we do not see physical objects; and to give our eyes access to the past may well seem the more reasonable course."<sup>21</sup> But time-lag cases do not compel us to choose between private and past objects of perception. An account of time-lag cases in terms of perceiving external and public, physical causal descendants of distant objects preserves the publicity of the objects of perception without relegating the objects of perception to the past. While causal descendants of past objects are not themselves physical objects, they are nevertheless objective and public, physical existents, and thus preserve the direct realist's notion of a direct contact with external physical reality.

Similar to Ayer, Dretske argues that "Either we must say that we *do* see into the past...or we must say (also contrary to common sense) that we really can't see the sun, the moon, and the stars. Take your choice. One is going to end up talking funny, like a philosopher, no matter which choice one makes."<sup>22</sup> But we do not end up "talking funny" if we combine the denial that we see the sun, moon and stars themselves with the assertion that we perceive some other public and external, physical existent, namely, light from the sun, moon and stars. We end up sounding like philosophers only when

we insist that nothing at all external and physical is perceived, and maintain instead that what is actually perceived is something internal and private to us, like sense-data.

Suchting's solution to the time-lag argument is to allow that, in the case of seeing stars, "we see now the light transmitted from them at different times in the past, according to the different degrees of remoteness of the stars from the earth."<sup>23</sup> Carrier similarly argues that "what we literally see in the case of the exploded star is its light. Since light is physical, we are not forced to say we see anything at all that is non-physical."<sup>24</sup> But many philosophers flatly reject the notion that we see light, thereby ruling out any explanation of time-lag cases in terms of seeing light from the distant objects. Armstrong, for example, rejects the notion that, in seeing distant stars, we immediately perceive "a *present* happening, causally connected with the extinction of the star many years ago."<sup>25</sup> We cannot see "light-waves from the star, for we do not see light-waves."<sup>26</sup> He concludes that "immediate perception is sometimes a perception of past happenings."<sup>27</sup>

A surprising number of philosophers conclude that time-lag cases involve perceiving the past. Maund, for example, argues that, although "the events one sees appear to occur 'now' (i.e., at the time of having the visual experience)...they are mostly past events."<sup>28</sup> Baylis similarly claims that "perception is perception of something at least finitely past....To perceive directly is never to perceive instantaneously."<sup>29</sup> Carrier argues that "What the Time-Gap Argument shows is that it is empirically impossible to see a physical object undergoing a change at exactly the time this change is undergone....it need not lead us to say either that we see something non-physical, or that we see that which no longer exists."<sup>30</sup> While Carrier is right that time-lags do not compel us to accept that we see either non-physical things or the past itself, there is little point in analysing perceptions into mathematical point instants of exact happenings or occurrences. The paradoxes and dilemmas which arise from treating events and occurrences as mathematical point instants are wholly contrived and avoidable by analysing perceptual experience in terms of the specious present. Since perceptual experiences can last the duration of the specious present, and can therefore take events which occur within the scope of the specious present, roughly half a second, they can take events which occur in the percipient's immediate physical environment, for the signal delays from items in the immediate physical environment are less than half a second.

It is only when things are very far away indeed that any adjustment to common sense is required. Where the source of the light is further away than the distance which light travels within the scope of the specious present, direct realists must adjust their analysis slightly, and say that it is the causal descendants of external physical objects which the percipient sees. In the case of seeing stars, direct realists must maintain that it is not the stars themselves which the percipient sees at this very moment, but instead their causal descendants, namely, the light which they emitted some time ago and which has only now reached the atmosphere of the Earth. Although talk of seeing causal descendants has a peculiar ring to it, it is better to deny outright that we can see stars, and to insist instead that we see their causal descendants, than to allow that we perceive either the past or private non-physical existents.

Near enough as is relevant to everyday life, we can see physical objects undergoing changes when those changes are undergone, namely, when they are undergone within the scope of the specious present. Incredibly small delays in transmission from nearby objects like tables and chairs can sensibly be ignored within the scope of the specious present. It is only if we begin to think of causal, perceptual and behavioural processes in terms of point-instants, like some abstract mathematics, that we begin to have difficulties concerning absolute simultaneity. The time-lag problem does not pose insuperable difficulties for common-sense realism and its notion of a direct confrontation with external physical reality.

Those theorists who argue that the facts of physical theory and signal delays mean that we can never actually perceive what is happening right now, even things in our immediate environment, conveniently overlook the fact that these signal delays run, not just to, but also from, the brain. Strictly speaking, we cannot even say the word "now" right now since "now" will already be past by the time the signal from our brain reaches our mouth. Any argument against seeing what is happening right now also applies to saying or writing the word "now." Since these critics are unlikely to abandon their use of the word "now," the direct realist is justified in attributing little weight to their arguments from physical theory and signal delays against direct realism.

We cannot see stars because they are too far away to be seen. The fact that we can see light from stars misleads us into believing that we can see the stars themselves. But it is no more the case that we must see stars themselves if we see their light than it is the case that we must see gunpowder if we see the flash as it ignites. The flickering which we see right now when we look up at the nighttime sky is not a flickering which is



occurring at this very moment in the immediate neighbourhoods of the stars, nor is it a flickering which is occurring in our own minds, but is instead a flickering of the light from these distant stars which has only now reached the atmosphere of the Earth.

Severe time-lags prevent identification of the direct or immediate objects of perception with distant physical objects like stars, but they do not prevent identification of the direct or immediate objects of perception with external physical existents in the percipient's immediate environment. Severe time-lags do not therefore rule out the direct realist's notion of a direct contact or confrontation with external physical reality.

## 5.6 Modified Disjunctivism and Strong Externalism

The modified disjunctivism about experience which I defended in the previous chapters maintains that genuinely perceptual experiences, unlike hallucinatory experiences, depend for their occurrence and nature upon events in the external physical world. From the fact that a phenomenally, qualitatively or subjectively indistinguishable experience can occur in the absence of appropriate, external physical objects, it does not follow that genuinely perceptual experiences can occur in the absence of appropriate external physical objects. Since hallucinations and genuine perceptions are type-distinct experiences, they do not require the same analysis with respect to content and objects. But the modified disjunctivism which I proposed maintains that perceptual content depends, not just upon *worldly* physical existents and events, but also upon existents and events *in the percipient's immediate physical environment*. The proposed modified disjunctivism about experience is therefore a relatively severe form of externalism about perceptual content.

Internalism or individualism maintains that perceptual content is "in the head" in the sense that it locally supervenes upon the percipient's internal physical and functional constitution, and that an identity of internal constitution entails an identity of perceptual content. Internalists insist that perceptual experiences or looks-states are intrinsically independent of the external physical world, and thus do not depend for their occurrence and nature on events in the physical environment. Externalists maintain that perceptual content is at least partly determined by, dependent upon or constituted by the external physical world. For externalists, an identity of internal physical and functional constitution is insufficient for an identity of perceptual content.

McGinn distinguishes between weak externalism and strong externalism.<sup>31</sup> Weak externalism about perceptual content is the view that perceptual content requires the existence *somewhere in the percipient's world* of some non-mental item. Strong externalism about perceptual content is the view that perceptual content requires the existence *in the percipient's immediate physical environment* of some non-mental item. Weak externalism requires only that perceptual experiences be identified by reference to properties which exist somewhere in the external physical world. Strong externalism requires that perceptual experiences be identified by reference to properties which are instantiated in the percipient's immediate physical environment. Since modified disjunctivism about experience ties the content of genuinely perceptual experiences to environmental circumstances, it is committed to a strong externalism about perceptual content. Strong externalism about perceptual content holds that, if the immediate physical environment had been different, then the non-propositional representational content of the percipient's perceptual experiences would necessarily have been different.

Unlike most externalists, I do not arrive at externalism about perceptual content by way of considerations of intentional propositional attitudes. Most externalists motivate their externalism about perceptual content by appeal to Putnam's and Burge's Twin Earth thought experiments and the alleged environment-dependence of intentional attitudes.<sup>32</sup> Burge's externalist arguments are intended to establish that propositional attitudes depend for their content on the individual's physical and social environment.<sup>33</sup> Twin Earth motivations for externalism about perceptual content thus rely on the assumption that perceptual experiences are intrinsically intentional. Believing that perceptual experiences are "properly specified and individuated" in intentional terms,<sup>34</sup> Burge offers several externalist or anti-individualist Twin Earth thought experiments to establish the dependence of intentional perceptual content on the percipient's physical and social environment. Burge believes that his anti-individualist arguments are applicable to early human vision because his arguments apply to intentional phenomena generally and he regards early human vision as essentially intentional.<sup>35</sup>

Since I deny that perceptual experiences essentially have intentional propositional content, I cannot appeal to Burge's Twin Earth-inspired arguments for an anti-individualist, externalist account of perceptual content. Since Putnam's and Burge's Twin Earth thought experiments presuppose reference and meaning, and since I deny that perceptual experiences are intrinsically referential or semantic, I cannot motivate my strong externalism about perceptual content by appeal to Putnam's and Burge's Twin Earth thought experiments. My strong externalism about perceptual content is

motivated, instead, by the modified disjunctivism about experience which I proposed earlier. The strong externalism which I advocate applies only to non-propositional perceptual content, and not belief content. I do not restrict the possibility of having perceptual experiences *as of* an X to instances in which there actually is an X in the percipient's physical environment.

Robinson construes direct realism as the view that features of the external physical world constitute the *only* content or objects of perceptual experience.<sup>36</sup> He thus interprets direct realism as the view that there can be absolutely no subjective, internally generated experiential content or objects, and correspondingly regards the "veil of perception" doctrine as the view that there is at least some subjective, internally generated experiential content or objects. Explaining that his target is externalism about perceptual content, Robinson thus construes externalism as the view that perceptual content is *wholly* determined by factors in the external physical world, and correspondingly regards internalism as the view that perceptual content is *at least partly* determined by factors internal to the percipient. But just as Robinson is mistaken in believing that direct realism is committed to the view that perceptual content is *wholly externally contributed*, with absolutely no subjective contributions, he is mistaken in believing that externalism is committed to the view that perceptual content is *wholly externally determined*, with absolutely no internal determinants. Externalism holds that perceptual content is *partly* fixed by the percipient's physical environment, that an identity of internal constitution is insufficient for an identity of perceptual content, *not* that perceptual content is *entirely* fixed by the percipient's physical environment. For the externalist, perceptual content crucially depends upon, but is not altogether determined by, the percipient's physical environment.

Heil construes internalism as the view that "intentional characteristics depend exclusively on intrinsic features of agents."<sup>37</sup> Externalism is thus the view that intentional characteristics do *not* depend solely on intrinsic features of agents. Externalism need not deny that there are internal, subjective determinants of perceptual content. As McGinn explains, externalism holds that perceptual content is "not (wholly) determined by what lies within the subject."<sup>38</sup> Externalism need not maintain that perceptual content is *wholly* determined by what lies *outside* the subject, that there are no internal determinants of perceptual content. Internalism is the view that perceptual content is locally supervenient, and thus wholly determined by the percipient's internal physical and functional constitution. Externalism is the view that internalism is false, that perceptual content is not locally supervenient, and thus not wholly determined by

internal factors. As both a disjunctivist about experience and a strong externalist about perceptual content, I believe that non-propositional perceptual content depends crucially upon, but is not altogether determined by, causal/contextual relations to the physical environment.

The causal theorist's common element thesis is internalist about perceptual content because it maintains that genuinely perceptual experiences can occur in the absence of appropriate, external physical objects, occurring either spontaneously or as a result of direct cortical stimulation, and that the intrinsic nature and content of perceptual experiences are therefore not dependent upon the percipient's physical environment, but are instead wholly internally determined by the percipient's physical and functional constitution. Strong externalists insist that genuinely perceptual experiences can occur only in the presence of appropriate external physical existents or objects, and that perceptual content is at least partly dependent upon or determined by the physical environment.

#### 5.7 McGinn's Argument Against Strong Externalism About Perceptual Content

McGinn offers a Twin Earth-inspired argument against strong externalism about perceptual content.<sup>39</sup> Since the proposed modified disjunctivism about experience maintains a strong externalism about perceptual content, I will explain why I believe that McGinn's argument does not refute strong externalism. Externalism denies that perceptual content is locally supervenient upon the percipient's internal physical and functional constitution, insisting that perceptual content is at least partly determined by factors in the external physical *world*. Strong externalism maintains that perceptual content is at least partly determined by factors in the percipient's immediate physical *environment*. To disprove strong externalism, McGinn's Twin Earth-inspired thought experiment must show that perceptual content is not determined or fixed by the nature of the percipient's immediate physical *environment*.

In McGinn's Twin Earth thought experiment, "internal states produced on earth by square things are produced by round things on twin earth."<sup>40</sup> Light rays from distal round objects are warped or bent by Twin Earth's atmosphere so that they form a square light array when they eventually strike a Twin Earth percipient's retinal surfaces. McGinn argues that the Twin Earth percipient continues to enjoy visual experiences with perceptual content *as of* square objects even though there are no square objects in the Twin Earth percipient's physical environment. Since a difference in the distal causes of

the Twin Earth percipient's visual experiences is insufficient to induce a difference in perceptual content, McGinn concludes that strong externalism about perceptual content is false.

McGinn believes that his Twin Earth thought experiment shows that subjective perceptual states, such as experiences *as of* square objects, do not "owe their identity and existence to the objective environmental contingencies."<sup>41</sup> But in his thought experiment, the Twin Earth percipient's perceptual content is bound to the nature of the square-shaped light array striking the percipient's retinal surfaces. While the square-shaped light array is not an environmental *object*, it is an environmental *existent* which contributes to determine the content of the Twin Earth percipient's perceptual experiences. Since McGinn's Twin Earth thought experiment shows only that perceptual content is not dependent upon environmental *objects*, and does not show that perceptual content is not dependent upon environmental *existents*, it does not demonstrate that perceptual content is independent of environmental determinants, and so does not disprove strong externalism about perceptual content. Strong externalism need not maintain that perceptual content is bound to the nature of environmental *objects*. Strong externalism is true if perceptual content is bound to the nature of environmental *existents*.

Even McGinn's "total strong externalism" asserts only that "all mental phenomena are bound to the nature of the environment of the subject."<sup>42</sup> To show that strong externalism about perceptual content is false, McGinn's argument must show that perceptual content is not determined by, dependent upon, or partly constituted by items in the percipient's physical *environment*. McGinn's argument succeeds in showing that perceptual content is not dependent upon environmental, *distal physical objects*, but does not succeed in showing that perceptual content is not dependent upon environmental, *proximate physical existents*, and so does not disprove strong externalism about perceptual content.

Although McGinn characterizes strong externalism about perceptual content as the view that "the content of experience is environmentally determined: how things can seem to you is fixed by how things objectively are around you,"<sup>43</sup> his argument against strong externalism about perceptual content commits strong externalists to the more extreme thesis that the content of experience is environmentally determined *by distal causes*. In effect, he defines strong externalism about perceptual content one way, but ends up arguing against strong externalism about perceptual content defined an entirely



different way. McGinn commits strong externalism to the view that distal causes of perceptual experiences fix perceptual content because he curiously regards the square-shaped light array incident at the percipient's retinal surfaces, the "proximal stimuli that assail his sensory receptors,"<sup>44</sup> as part of the percipient's *internal* properties. But it is open to the strong externalist to deny that stimuli assailing the sensory receptors qualify as internal properties of the percipient, and thus deny that they qualify as legitimate parts of the internal physical and functional constitution of the percipient.

McGinn's argument does not show that the Twin Earth percipient's perceptual content *as of squareness* is not determined by environmental instantiations of squareness, and so does not pull perceptual content away from the external physical world. While the Twin Earth percipient's perceptual content *as of squareness* is not determined by distal square *objects* in his environment, it is determined by square-shaped light arrays striking his retinal surfaces, and these light arrays just are square *things* in his physical environment, environmental instantiations of squareness, which determine his perceptual content *as of squareness*. To show that perceptual content is independent of square *objects* is not yet to show that perceptual content is not fixed by square *things* in the physical environment. Since McGinn's argument shows only that perceptual content *as of squareness* is independent of square *objects* in the physical environment, not that perceptual content *as of squareness* is independent of square *things* in the physical environment, his argument fails to show that perceptual content is independent of environmental determinants, and thus fails to refute strong externalism about perceptual content.

McGinn's argument against strong externalism about perceptual content depends upon setting up a conflict between square-appropriate behaviour and an environment containing only round objects. He argues that, since behaviour and environment conflict on Twin Earth, we should align perceptual content with behaviour, and reject strong externalism about perceptual content. But since there is no conflict between square-appropriate behaviour and the environmental, square-shaped light arrays from the distal round objects, since behaviour can still be regarded as both aligned with and determined by factors in the external physical environment, we are not compelled to abandon strong externalism about perceptual content. The Twin Earth percipient's behaviour is appropriate for the square, environmental causal descendants of the distal round objects, so there is no conflict between behaviour and the environment which would render the individuation of perceptual content environment-independent. The strong externalist need not pull perceptual content as far out into the

world as McGinn supposes, namely, to the distal causes of the perceptual experiences. The strong externalist can pull perceptual content out to a part of the external physical world which does not conflict with square-appropriate behaviour, namely, that part containing square causal descendants of the distal round objects. Having perceptual content at least partly fixed by the environment does not mean that perceptual content must be fixed by remote distal causes in the environment.

In the initial statement of his Twin Earth argument against strong externalism about perceptual content, McGinn claims that the question is whether it follows from the fact that a percipient has a perceptual experience *as of* a square thing "that his environment contains (or has contained) square things with which he has interacted in some fashion."<sup>45</sup> There is no requirement that perceptual content be determined only by *distal causes* in the percipient's environment. Notice also that McGinn speaks only of square *things* in the percipient's environment, not of square *objects*. It is not a requirement of strong externalism that perceptual content be determined only by physical *objects* in the percipient's environment, as opposed to physical *things* or *existents*. Strong externalism about perceptual content requires only "the existence in the environment of the subject of some item belonging to the nonmental world."<sup>46</sup> A strong externalist about perceptual content can maintain that perceptual content is fixed either by environmental physical *existents* or by environmental physical *objects*. Strong externalism's notion that perceptual content is environmentally determined need not be construed as the view that perceptual content is determined only by physical *objects* in the environment.

Strong externalism maintains only that perceptual content depends in part upon circumstances which are external to the percipient's physical and functional constitution, not that perceptual content is (1) wholly fixed by external circumstances, with absolutely no subjective contribution or determination, (2) wholly fixed by *distal* environmental causes of the perceptual experiences, or (3) wholly fixed by environmental *objects*, as opposed to environmental *existents*. Since perceptual content need not be determined by external physical objects, but can instead be determined by physical causal descendants of external physical objects, it need not be determined by distal environmental causes, but can instead be determined by square-shaped existents in the percipient's immediate environment. The percipient's square-appropriate behaviour conflicts only with the distal round causes of the perceptual experiences, not with the proximate, square-shaped causal descendants of the distal round objects. So behaviour and the physical environment do not conflict, and we are not compelled to abandon

strong externalism about perceptual content. Perceptual content remains environmentally determined, and thus individuation-dependent upon the nature of the percipient's environment. Since strong externalism is not committed to *distal* environmental determinants of perceptual content, McGinn's argument does not succeed in undermining strong externalism about perceptual content, and the modified disjunctivism about experience proposed earlier is not refuted.

- 1 R.J. Hirst, "Sense-Data and Common Sense," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, p. 287.
- 2 C.W.K. Mundle, "Common Sense Versus Mr. Hirst's Theory of Perception," *Proceedings of the Aristotelian Society* 60 (1959-60), p. 72.
- 3 *Ibid.*, p. 73.
- 4 *Ibid.*
- 5 Charles A. Baylis, "Foundations for a Presentative Theory of Perception and Sensation," *Proceedings of the Aristotelian Society* 66 (1965-66), p. 53.
- 6 Hirst, "Sense-Data and Common Sense," p. 288.
- 7 *Ibid.*, p. 289.
- 8 R.J. Hirst, "A Reply To Professor Mundle," *Proceedings of the Aristotelian Society* 60 (1959-60), p. iii.
- 9 Hirst, "Sense-Data and Common Sense," p. 289.
- 10 A.J. Ayer, "Symposium: The Causal Theory of Perception," *Proceedings of the Aristotelian Society*, supplementary volume 51 (1977), p. 120.
- 11 A.J. Ayer, *Philosophy In the Twentieth Century*, London: Unwin Paperbacks, 1990, p. 33.
- 12 H.V. Stainsby, "Sight and Sense-Data," *Mind* 79 (1970), p. 178.
- 13 Roderick M. Chisholm, *Perceiving: A Philosophical Study*, Ithaca: Cornell University Press, 1957, pp. 151-2.
- 14 D.M. Armstrong, *A Materialist Theory of the Mind*, London: Routledge & Kegan Paul Ltd., 1971, p. 241.
- 15 Winston H.F. Barnes, "The Myth of Sense-Data," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 163.
- 16 Jerry A. Fodor and Zenon W. Pylyshyn, "How Direct is Visual Perception?: Some Reflections on Gibson's 'Ecological Approach,'" *Cognition* 9 (1981), p. 153.
- 17 R.J. Hirst, *The Problems of Perception*, New York: Humanities Press Inc., 1978, p. 51.
- 18 *Ibid.*, p. 77.

- 19 M. Arthadeva, "Naive Realism and Illusions of Refraction," *Australasian Journal of Philosophy* 37 (1959), p. 136.
- 20 *Ibid.*, pp. 136-7.
- 21 A.J. Ayer, *The Problem of Knowledge*, London: Macmillan and Co. Ltd., 1958, p. 104.
- 22 Fred I. Dretske, *Explaining Behavior: Reasons in a World of Causes*, Massachusetts: M.I.T. Press, 1992, p. 20.
- 23 W.A. Suchting, "Perception and the Time-Gap Argument," *Philosophical Quarterly* 19 (1969), p. 55.
- 24 L.S. Carrier, "The Time-Gap Argument," *Australasian Journal of Philosophy* 47 (1969), p. 269.
- 25 D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, p. 147.
- 26 *Ibid.*, p. 148.
- 27 *Ibid.*
- 28 J.B. Maund, "The Non-Sensuous Epistemic Account of Perception," *American Philosophical Quarterly* 13 (1976), p. 58.
- 29 Baylis, "Foundations for a Presentative Theory of Perception and Sensation," p. 52.
- 30 Carrier, "The Time-Gap Argument," p. 272.
- 31 See Colin McGinn, *Mental Content*, Oxford: Basil Blackwell Ltd., 1991, p. 7.
- 32 See Hilary Putnam, "The Meaning of 'Meaning'," in *Philosophical Papers Volume 2: Mind, Language and Reality*, Cambridge: Cambridge University Press, 1975, pp. 215-71, and Tyler Burge, "Individualism and the Mental," in *Studies in Metaphysics, Midwest Studies in Philosophy*, volume 4, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1979, pp. 73-121, "Other Bodies," in *Thought and Object: Essays on Intentionality*, Andrew Woodfield (ed.), Oxford: Oxford University Press, 1982, pp. 97-120, "Individualism and Psychology," *Philosophical Review* 95 (1986), pp. 3-45, and "Vision and Intentional Content," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993, pp. 195-213.
- 33 Burge, "Individualism and the Mental," p. 84.
- 34 Tyler Burge, "Cartesian Error and the Objectivity of Perception," in *Subject, Thought, and Context*, John McDowell and Philip Pettit (eds.), Oxford: Oxford University Press, 1986, p. 126.
- 35 Burge, "Individualism and Psychology," pp. 29, 32, 34.



36 Howard Robinson, "The General Form of the Argument for Berkeleian Idealism," in *Essays on Berkeley: A Tercentennial Celebration*, John Foster and Howard Robinson (eds.), Oxford: Clarendon Press, 1988, p. 173.

37 John Heil, *The Nature of True Minds*, Cambridge: Cambridge University Press, 1992, p. 24.

38 McGinn, *Mental Content*, p. 2.

39 Ibid., pp. 59 ff.

40 Ibid., p. 60.

41 Ibid., p. 63.

42 Ibid., p. 44.

43 Ibid., p. 58.

44 Ibid., p. 75.

45 Ibid., p. 59.

46 Ibid., p. 7.

## Chapter 6

### The Conditions of Perception

#### 6.1 Theories Versus Analyses of Perceiving

Philosophers of perception have traditionally felt compelled to offer their own theory of perception. But philosophers often mean quite different things when they speak of "theories of perception." Some philosophers mean simply analyses of perceptual statements. Hirst interprets "theories of perception" as "attempts to discover the facts of perception, to explain them and solve the problems to which they give rise."<sup>1</sup> To the extent that I offer a common-sense analysis of perceptual phenomena like hallucinations and perceptual illusions in an attempt to show that such phenomena do not, in fact, preclude the direct realist's notion of a direct contact or confrontation with external physical reality, what follows qualifies as a theory of perception in Hirst's rather broad interpretation of the phrase. By concentrating on the metaphysics, as opposed to the epistemology, of perceptual experience, I will be undertaking what Hirst regards as an "analysis" of perception.

But by "theories of perception," most philosophers have in mind a set of individually necessary and jointly sufficient conditions of perceiving. Pitcher, for example, insists that any philosophical theory of perception must include a statement of necessary and sufficient conditions for a percipient to perceive things in the various sense modalities.<sup>2</sup> Within this narrow interpretation, what follows does not constitute a theory of perception, for I do not attempt to offer a comprehensive list of necessary and sufficient conditions of perceiving. I do not believe that constructive discourse in the philosophy of perception requires the identification of a set of necessary and sufficient conditions of perceiving, and thus the setting out of a formal theory or account of perception in the narrow and traditional sense of these terms.

It is simply not necessary to advance a new theory, model or account of perception in order to talk intelligently or usefully about the philosophical issues involved in perceiving. It is possible to set minimum constraints on a plausible theory of perception, for example, that it be able to address time-lags in terms of objective, public phenomena, without having to set out a theory of perception *per se*. Like Warnock, I believe that "the notion of a theory has overtones of vaulting ambition, even of

pretension," and that "it is not perfectly clear what sort of thing a theory of perception would be."<sup>3</sup> Although his name is closely associated with the causal theory of perception, even Grice expresses doubts about what qualifies as a theory of perception.<sup>4</sup>

## 6.2 Some Necessary Conditions of Perceiving

While there is general agreement among philosophers of perception on conditions which are necessary for perceiving, conditions which, when interfered with or interrupted, prevent perceiving, there is little agreement on conditions which are sufficient for perceiving. The necessary conditions of perceiving which I identify below are not intended to be exhaustive, or to constitute any sort of theory or account of perception, but are instead merely suggestive of a general direction of theorizing, more of a compass for theorizing than a road map.

I maintain that S perceives X only if:

- (1) S has a perceptual experience of X, analysable in terms of X's looking or appearing some way to S and there being a way that it is like for S to perceive X;
- (2) there is an X there before S in S's field of view which is both large and close enough to be perceived by S and which is contemporaneous, or nearly contemporaneous, with S's perceptual experience of X;
- (3) X is the sort of thing which can be perceived by Ss, that is, X is an external and public, physical existent or object;
- (4) X is not obscured or hidden from S by some other physical existent or object which is perceived by S; and
- (5) X is at least a part cause of S's having a perceptual experience of X, or of X's looking or appearing some way to S.

Each of these necessary conditions of perceiving requires some explanation and elaboration. I begin with the first and most important necessary condition of perceiving, that the percipient have a perceptual experience of the object of perception.

While philosophers of perception generally agree that perceiving is experiencing, they disagree about what perceptual experiences are. Although Warnock rightly rejects noticing X as a necessary condition of seeing X, his proposed set of individually necessary and jointly sufficient conditions of S's seeing X, that S be conscious, have reasonably properly functioning eyes, and have set eyes on X,<sup>5</sup> must be supplemented

by a further necessary condition, namely, that S have a visual experience of X. Merely to set eyes on X, when one is conscious and has properly functioning eyes, is insufficient for having a visual experience of X, and so insufficient for seeing X.

In low light conditions, we frequently see silhouettes of physical objects without having visual experiences of their facing surfaces, and so without seeing their facing surfaces at all. Merely to set eyes on the facing surfaces of physical objects, to be looking directly at the surfaces with eyes which are appropriately focused upon the surfaces, is insufficient for seeing the surfaces. Although we are conscious and set properly functioning eyes on the facing surfaces of silhouetted objects by both looking directly at, and being properly visually focused upon, the surfaces, we fail to have visual experiences of the facing surfaces of silhouetted objects, and thus fail to see them. We can set eyes on X without, as it were, setting visual experience on it. We can be both cognitively and demonstratively directed upon the facing surfaces of silhouetted objects without the facing surfaces looking or appearing some way to us, and thus without our seeing them.

In speaking of S's "setting eyes on" X, Warnock clearly intends that S have some sort of visual experience of X, that X look or appear some way to S. His set of individually necessary and jointly sufficient conditions of S's seeing X is more plausible when it is supplemented by an explicit requirement that S have a visual experience of X, and the recognition that S's merely setting eyes on X, or having appropriately focused eyes pointed directly at X, is insufficient for having a visual experience of X. We do not see the facing surface of a silhouetted object because the presence or absence of the facing surface makes no difference to our visual experience. We would not, for example, notice the sudden absence of the facing surface. But since the presence or absence of the silhouetted object itself makes a difference to our visual experience, since we would notice the sudden absence of the object as a whole, we can be said to see the silhouetted object, even when we cannot be said to see its facing surface.

French is correct that "'seeing' seems closer to 'laying eyes on' than to 'knowing that,' or 'noticing'," <sup>6</sup> but simply laying eyes on something is insufficient for seeing it. S's seeing X requires, not just S's laying eyes on X, but also X's looking some way to S such that S would notice X's sudden absence. S cannot see X unless X makes a difference to S's visual experience. By building the capacity to notice the sudden absence of whatever is genuinely perceived into my notion of simple perception, my analysis of non-epistemic perception amounts to more than the philosophically vacuous thesis that

S sees X when X reflects light into S's properly functioning eyes.<sup>7</sup> On my non-epistemic analysis, S sees X, not simply when S is conscious, sets properly functioning eyes on X, and X reflects or emits light into S's eyes, but also when X looks some way to S such that S would visually notice X's sudden absence.

Having recognized that merely to set eyes on X is insufficient for seeing X, many contemporary philosophers of perception follow Dretske in maintaining that we see X only when we both set eyes on X and X is visually differentiated from its immediate environment, that is, X both looks some way to us and looks different than its surroundings.<sup>8</sup> Dretske argues that the content of non-epistemic perception, or simple perceiving, is given by the objects of perception being perceptually differentiated from their immediate environment by the percipient. His laudable non-epistemic agenda is to distinguish a species of perception which is wholly devoid of inference, belief, knowledge, judgment, identification or recognition, but which is nonetheless a genuine form of perceiving, and not just sensation. Dretske's account of non-epistemic perception posits perceptual discrimination or differentiation of X as a necessary condition of perceiving X. Like Dretske, Runzo believes that perception minimally involves differentiation of the object of perception from its environmental context.<sup>9</sup> Searle similarly claims that "our perceptual experiences come to us as a figure against a background,"<sup>10</sup> thereby building discrimination into perceptual experience itself.

But I believe that there are cases of seeing in which the percipient is wholly incapable of discriminating what is perceived from its background. S can possess the capacity visually to notice X's sudden absence without ever possessing the capacity to discriminate X from its background. We can imagine a situation in which no amount of tutoring would enable S to discriminate X from its surroundings, yet S might still visually notice X's sudden absence, and thereby have seen X before it disappeared. Kneale discusses the case of seeing, but not visually noticing or discerning, a darned patch on a coat.<sup>11</sup> We see the darned patch even though we do not discriminate the patch from its surroundings. If the darned patch is skillfully executed, then there is not even the possibility of discriminating the patch from its surroundings when the coat is viewed with unaided vision from, say, three feet away. No amount of attending to the darned patch would have enabled us to discriminate the patch from its surroundings. We need not possess the capacity to discriminate an object from its background simply to perceive it. All that is required is that the object make a difference to our perceptual experience such that we would notice the sudden absence of the object. We see the darned patch on the coat, despite the fact that we are wholly incapable of discriminating it from its



surroundings, because we would visually notice its sudden absence, visually noticing the hole in the coat which the patch had replaced.

The assumption that perceptual experiences essentially refer to their objects is probably partly to blame for the mistaken view that perceiving X requires actual or possible discrimination of X. If one assumes with Clark, Smith and Searle that perceptual content essentially involves demonstrative reference, and if demonstratively referring to X requires isolating X from its background, then one will naturally conclude that perceiving X requires discriminating X from its background. But if we abandon the assumption that perceptual content is essentially demonstrative in structure, maintaining instead that perceptual content is essentially indexical in structure, we remove a principal reason for believing that perceiving X requires discriminating or differentiating X from its background.

Against Dretske and his followers, I believe that discriminating or differentiating an object from its background just is to perceive it *as* in the foreground. Figure/field separation just is to perceive an object *as* a figure against a field. Runzo concedes that to discriminate X is to discriminate X *as* something or other, however vague or indefinite.<sup>12</sup> Since perceiving *as* essentially involves the possession and application of concepts, and is thus cognitive, perceptual discrimination or differentiation is essentially an epistemic activity. Perceptual discrimination just is perceiving *as*, and is thus would-be judging, believing or taking to be the case, and so epistemic. If Baker is correct that distinguishing X from Y is intentional,<sup>13</sup> and if intentional activity is cognitive activity, then perceptual discrimination of X from its background will essentially be epistemic. As a non-epistemic theorist, I reject the notion that perceptual discrimination is a necessary condition of perceiving. I deny that perceiving requires either actual discrimination, as held by Dretske, or a capacity to discriminate, as held by Lewis.<sup>14</sup> In his later work, Dretske himself concedes that "discriminate" is a cognitive verb.<sup>15</sup> Discriminating or differentiating an object from its background just is to notice the difference between the object and its background, and noticing this difference is a cognitive activity which can occur only at higher-level cognitive processing.

A potential threat to the proposed view that discrimination or differentiation of the object of perception occurs only at higher-level cognitive processing is the fact that edge detection occurs at a low-level of perceptual processing, with dedicated edge detectors hard-wired into the visual cortex. Edge detection would seem to be the detection of where one thing stops and another thing begins, which at the very least

implies differentiating one thing from another, even if it does not imply differentiating subject from field. Dretske is probably encouraged to build discrimination into his account of non-epistemic perceiving by the fact that various neurons in the visual cortex, such as edge and contour detectors, selectively respond to different properties of the visual stimulus.

However, edge detectors themselves do not detect *objects*, but instead detect only the *edges* of objects. Edge detectors in the visual cortex selectively respond to borders between light and dark, not between objects and non-objects, or between objects and their backgrounds. Edge detectors therefore do not discriminate objects from their background, but at best discriminate edges from non-edges, which is far less than what is required by those philosophers who wish to make visual discrimination or differentiation of an object a necessary condition of seeing it. At the level of low-level processing, we have at best discrimination or differentiation of some of an object's edges, which is far from being a discrimination or differentiation of the object itself.

Since discriminating or differentiating X from its surroundings is essentially a cognitive activity, I deny that seeing X is a matter of setting eyes on X while discriminating or differentiating X from its background. I maintain, instead, that seeing X is a matter of setting eyes on X while having a visual experience of X, and thus X's looking or appearing some way to us. If X's presence or absence makes no difference to its looking to S as if F, then it cannot be X which looks to S as if F, and so cannot be X which is seen. X's being both F and objectively F-looking are insufficient for X's looking F to S. X's looking F to S cannot be identified with a purely physical event because neither S nor S's conscious states are purely physical states of affairs.

Although we can stare or look *in the direction of* X without thereby seeing X, I do not agree with Sibley and Runzo that we can stare or look *at* X without thereby seeing X.<sup>16</sup> It is highly misleading to say that S is staring or looking *at* X but has not yet seen it. It is preferable to say either that S's eyes are pointed *in the direction of* X but that S has not yet seen X, or that S is looking *at* X but that S has not yet recognized or identified X, and so has not yet seen X as an X, although S has seen X all the same. Looking *at* and seeing must be distinguished because we can see things in our visual periphery without ever looking at them. But the fact that we can see things in our visual periphery without looking at them does not entail that we can look at things in the centre of our field of vision without thereby seeing them. Seeing is insufficient for looking at, but looking at, as opposed to looking for and looking in the direction of, is

sufficient for seeing. We can look for, but cannot look at, X without seeing X. If we fail to see X, then we were not, after all, looking at X, but were instead merely looking in the direction of X.

As far as the second necessary condition of perceiving is concerned, that the object of perception occupy the percipient's perceptual field, I regard the field of vision to be that part of the percipient's physical environment which can be seen by the percipient, namely, that part of the environment which is both large and close enough and emits or reflects sufficient light to be seen by the percipient in question. By "visual field," I mean the sum total of what a percipient is visually aware of at any one moment in time. By "field of view," I mean all that a percipient *could* be visually aware of at any one moment in time.

Concerning the third necessary condition of perceiving, that the object of perception be the sort of thing which can be perceived by the percipients in question, I regard things like shadows, rainbows, reflections, lightning and beams of light as external and public, physical existents which we can genuinely perceive. Although they exist, and thus have a place in space and time, they do not qualify as physical objects because they do not persist or undergo changes in the manner of objects. Prisms do not so much as bend light as redirect subsequent light waves or particles. We can see light itself, even though it is not a physical object, because it is still an objective and public, physical *existent*. Our ability to see the sparks of electrical discharge between poles in a sealed vacuum tube shows that vision does not require seeing the interaction of light and physical existents, for, in a vacuum, there are no physical existents with which the light can interact.

Although the fourth necessary condition of perceiving, that the object of perception not be obscured or hidden from the percipient by some other physical object, is largely self-explanatory,<sup>17</sup> Dretske's discussion of an imaginary case raises the question of what, exactly, is required for a physical object to look or appear some way to a percipient. Dretske considers the case of a man who claims to be able to see physical objects on the other side of a high wall despite the fact that tests reveal that no transmission of light from the physical objects is responsible for his experiences.<sup>18</sup> Significantly, the man's ability successfully to describe whatever physical objects are placed on the other side of the wall ceases whenever he turns away from the wall or closes his eyes. Dretske concludes that, although there is no known causal explanation for the man's abilities, we could hardly deny that the man sees the physical objects on

the other side of the wall if the physical objects are at least partly causally responsible for his successful descriptions of them. The fact that we cannot at present explain *how* the man sees physical objects on the other side of the wall does not entail that he does not see them. There may simply be undiscovered "causal linkages" between the physical objects and the man.

Like Dretske, I believe that the imagined case as described qualifies as a genuine case of seeing. But it may be helpful to consider *why* the case qualifies as genuinely visual. In his discussion, Dretske speaks of causal linkages, causal chains, causal responsibility and causal explanation. But it is important to distinguish between: (1) genuine connection; (2) nomic or lawful dependence; (3) causal connection; and (4) connection by causal processes. Most contemporary philosophers accept that connection by causal processes entails, but is not entailed by, causal connection, and that causal connection entails both genuine connection and nomic or lawful dependence. Dummett additionally believes that nomic or lawful dependence entails genuine connection but not connection by causal processes, and so not causal connection.<sup>19</sup> Dummett's notion of "quasi-causation" posits *retroactive* dependency, the dependence of earlier events on later events, and so genuine connection and nomic or lawful dependence in the absence of causal processes, and thus in the absence of causal connection. Dummett acknowledges that a remote cause can be connected to its remote effect only by means of a causal process, and causal processes cannot extend backwards in time. The dependence of earlier events on later events cannot therefore be a function of causal processes, and thus cannot involve causal connection.<sup>20</sup>

Russell similarly holds that causal connection entails both genuine connection and nomic or lawful dependence, but not connection by causal processes.<sup>21</sup> Russell's notion of "mnemic causation" posits *proactive* dependency, the dependence of later events on earlier events, and thus genuine connection, nomic or lawful dependence and causal connection, in the absence of causal processes. Mnemic causes act upon their mnemic effects at a distance, in the absence of a causal chain of causal processes extending from the earlier mnemic causes to their later mnemic effects. Just as Dummett's "quasi-causes" act at a distance to bring about their "quasi-effects," Russell's "mnemic causes" act at a distance to bring about their "mnemic effects."

In the perceptual context, nomic or lawful dependence, and thus lawful covariance, entails genuine connection. Evidence of masking in perception, such as the cessation of the man's ability to describe physical objects on the other side of the wall

when he turns away from the wall or closes his eyes, *just is* evidence of lawful covariance, and so nomic or lawful dependence, between experiences and their objects. Evidence of masking is thus evidence of the involvement of a genuine connection. Experience E can be shown to involve genuine connection between percipient S and physical object X when E is shown to be subject to masking with respect to X, and is thus shown to depend nomically or lawfully upon X. Unlike Dummett, I do not believe that nomic or lawful dependence can extend backwards in time, with earlier events nomically or lawfully depending for their occurrence upon the occurrence of later events. Unlike Russell, I do not believe that, in the absence of any intervening causal processes, nomic or lawful dependence can extend forwards in time, with later events causally depending upon, and thus being causally connected to, earlier events. I agree with Dummett that there can be no genuine causal connection between non-simultaneous events in the absence of causal processes.

We expect any proper organ of sense to be subject to masking since we regard masking as evidence that a genuine mechanism of sensory connection is being interfered with or interrupted. We can speak of perceiving, and thus an organ of sense, only when there is evidence of a mechanism of connection between object and subject, and we have evidence of a mechanism of connection only when we have evidence that the correlations are subject to masking. It is precisely because subjects in parapsychology experiments are not susceptible to masking that it is highly doubtful whether there is any genuine connection involved in the statistically significant correlations between the subjects' responses and the experimental targets, and thus highly doubtful whether the subjects genuinely, albeit extra-sensorily, perceive.

In Dretske's imagined case, it is the evidence of masking, the man's failure to describe the physical objects when he turns away from the wall or closes his eyes, which entitles us to speak of the him *seeing* the physical objects on the other side of the high wall. The evidence of masking reveals the nomic or lawful dependencies of his experiences on the states of the physical objects, and thus a genuine sensorial connection between the man and the states of the physical objects. The fact that the genuine connection and nomic or lawful dependencies do not involve the transmission of light from the physical objects does not rule out other causal processes as the source of the connection and dependencies.

In addition to genuine connection and nomic or lawful dependency, there must be some sort of process involved in perceiving since there must be a mechanism of



genuine connection, something in virtue of which percipients and states of physical objects are genuinely connected. The lesson to draw from Dummett's notion of "quasi-causation" is that it is vacuous to talk of genuine connection and backwards dependency when there cannot logically be any processes to serve as the mechanism of connection inasmuch as any processes would necessarily run away from, rather than towards, the quasi-effects. Dummett's problems arose when he posited a non-causal, nomic or lawful dependency of earlier events on later events but retained the notion of the efficacy or effectiveness of the later events, the idea that the later events bring about the earlier ones. Since all processes occurring in time with a forwards temporal direction themselves have a forwards temporal direction, there could not logically be any processes to bear the "quasi-efficacy" to the "quasi-effects" in the past. The "quasi-efficacy," or bringing about, would either be located in the present, with no processes to convey it into the past, or located in the past, with no processes to underwrite the genuine connection between the "quasi-cause" and "quasi-effect."

We can speak of S perceiving X only if S is genuinely connected to X. Direct realists construe S's genuine connection to X in terms of S's direct contact or confrontation with X. But a genuine connection requires a mechanism of connection, something the obtaining of which explains the obtaining of the genuine connection. Smith and Jones observe that, "in claiming that there is a real causal relation...we do commit ourselves to there being some linking mechanism or other; and it should in principle be discoverable what it is."<sup>22</sup> In the absence of any mechanism of connection, any causal claim "will remain merely a promissory note."<sup>23</sup> A mechanism of connection, in turn, seems to require processes. Dummett's notion of "quasi-connection" is implausible since genuine connections entail mechanisms of connection, mechanisms of connection seem to require processes, and processes cannot run backwards in time. Since genuine connections can be underwritten only by processes which run forwards in time, Dummett has no means of underwriting his "quasi-connection." It is not surprising, then, that Dummett concedes that there is no hope of *explaining* "quasi-connection."

Even classical examples of action at a distance still seem to involve causal processes. Consider, for example, the moon's gravitational influence on the surface of the earth, with its resulting tides. The moon allegedly causes the earth's tides, and is thus causally connected with the earth, without initiating a chain of causal processes which extend from the moon to the surface of the earth. But there still seems to be a causal process involved since, if the moon were suddenly to explode, it is implausible to

suppose that the gravitational effects on earth would occur instantaneously. Any delay in the effects would imply the presence of causal processes which convey the gravitational effects to the surface of the earth. Even if the gravitational force involves no movement or transmission of particles or existents, its extremely remote effects are not likely to be simultaneous, and so must involve causal processes.

I believe that genuine perception requires causal processes, and thus causal connections, between physical objects and percipients. Evidence of masking is evidence of nomic or lawful dependencies, and thus genuine connections, between physical objects and percipients. But there can be genuine connections only if there are underlying mechanisms of connection, mechanisms the obtaining of which explains the obtaining of the genuine connections. S perceives X only if S's experiences are subject to masking with respect to X, and S's experiences are subject to masking with respect to X only if S's states nomically or lawfully depend upon X, and thus S is genuinely connected to X. S is genuinely connected to X only if there is a mechanism of connection between S and X. In everyday vision, the mechanism of connection is light emitted or reflected by X. But we must allow for mechanisms of *visual* connection between S and X which do not involve light, or electromagnetic radiation in the visible spectrum. The mechanism of visual connection between S and X might, for example, be infrared radiation. Dretske's imagined case qualifies as genuinely visual because the man's ability to describe physical objects on the other side of the wall is subject to masking, and hence involves nomic or lawful dependencies, and thus genuine connections, between the man and states of physical objects.

Regarding the fifth necessary condition of perceiving, it is clear that S cannot perceive X unless X stands in an appropriate causal relation to S's sense organs, or their equivalents. The causal theory of perception maintains that S cannot perceive X unless X stands in an appropriate causal relation to S's matching *inner perceptual experience*. I accept a causal *condition* on perception without subscribing to the causal *theory* of perception. A disjunctive analysis of experience which concedes that S cannot perceive X unless X has a causal impact on S's sense organs is a causal *analysis* of perception which nonetheless rejects the causal *theory* of perception, the notion that hallucinations and genuine perceptions share common looks-states which, when appropriately caused from without, constitute perception. S perceives X, not when X is a part cause of S's inner perceptual experience of X, but rather when X is a part cause of S's *having* a perceptual experience of X and X makes a difference to S's perceptual experience such

that S would notice X's sudden absence. Genuine perception requires a counterfactual dependence of perceptual experience on the states of affairs before the percipient.<sup>24</sup>

I do not include the action of the biological sense organs in the fifth necessary condition of perceiving since I fully accept the possibility of perceiving through prosthetic sense organs, such as Pears's seeing-aid analogue of a hearing-aid.<sup>25</sup> I therefore allow for the possibility of genuinely perceptual experiences which are facilitated by artificial sense organs. A subject fitted with prosthetic eyes could enjoy precisely the same visual experiences he has when he sees external physical objects with his biological eyes provided that the prosthetic eyes functioned like the biological eyes and faithfully transduced the stimulus light array from external physical objects into appropriate activity in the visual cortex. I therefore accept the possibility of a genuinely visual experience which involves duplication at an artificial retinal surface of the pattern of stimulation which would normally occur at a biological retinal surface.

But I deny that one can have a genuinely visual experience *simply* by duplicating at an artificial retinal surface the pattern of stimulation which an external physical object normally causes at a biological retinal surface, that duplicating the pattern of stimulation at a biological retinal surface is *sufficient* for having a genuinely visual experience, even in the absence of appropriate, external physical objects. A genuinely visual experience can be *facilitated* by stimulation at an artificial retinal surface, but cannot be *produced* by mere stimulation at an artificial retinal surface in the absence of appropriate, external physical objects.

Jackson blurs the distinction between genuinely visual experiences *facilitated* by prosthetic eyes and experiences *produced* by direct stimulation of the visual cortex, insisting that "visual experiences can (and do) occur without the use of the eyes."<sup>26</sup> The fact that genuinely visual experiences can occur without the use of the biological eyes when they are facilitated by prosthetic eyes which function like biological eyes by transducing the light array from external physical objects into electrical stimulation in the visual cortex does not entail that genuinely visual experiences can and do occur without the use of the biological eyes when the visual cortex is artificially stimulated by a probe, without the light array from external physical objects being transduced into electrical impulses in the visual cortex.

Notes

- 1 R.J. Hirst, "Symposium: The Difference Between Sensing and Observing I," *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954), p. 205.
- 2 George Pitcher, *A Theory of Perception*, Princeton: Princeton University Press, 1971, p. 59.
- 3 G.J. Warnock, critical notice of Fred I. Dretske's *Seeing and Knowing*, *Mind* 79 (1970), p. 281.
- 4 H.P. Grice, "The Causal Theory of Perception," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 472.
- 5 G.J. Warnock, "Seeing," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, pp. 52, 58.
- 6 Peter A. French, "'Seeing' and 'Seeing That', 'Observing' and 'Observing That'," in *Studies In Epistemology*, Nicholas Rescher (ed.), *American Philosophical Quarterly*, monograph series 9 (1975), p. 90.
- 7 See Daryl Close, "More on Non-Epistemic Seeing," *Mind* 89 (1980), p. 100, for the complaint that the non-epistemic theorist's notion that S sees X just so long as X reflects light into S's working eyes is philosophically trivial.
- 8 See Fred I. Dretske, *Seeing and Knowing*, Chicago: The University of Chicago Press, 1969, p. 20.
- 9 Joseph Runzo, "The Propositional Structure of Perception," *American Philosophical Quarterly* 14 (1977), p. 214.
- 10 John R. Searle, *The Rediscovery of the Mind*, Cambridge: The M.I.T. Press, 1992, p. 132.
- 11 William Kneale, "An Analysis of Perceiving in Terms of the Causation of Beliefs II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 73.
- 12 Joseph Runzo, "The Radical Conceptualization of Perceptual Experience," *American Philosophical Quarterly* 19 (1982), p. 206.
- 13 Lynne Rudder Baker, "Has Content Been Naturalized?" in *Meaning In Mind: Fodor and His Critics*, Barry Loewer and Georges Rey (eds.), Oxford: Blackwell Publishers, 1993, p. 22.
- 14 David Lewis, "Veridical Hallucination and Prosthetic Vision," *Australasian Journal of Philosophy* 58 (1980), p. 246.

- 15 Fred I. Dretske, *Explaining Behavior: Reasons in a World of Causes*, Massachusetts: M.I.T. Press, 1992, p. 76.
- 16 See F.N. Sibley, "Analysing Seeing I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 96, and Runzo, "The Radical Conceptualization of Perceptual Experience," p. 208.
- 17 In "The Causal Theory of Perception," p. 462, Grice discusses the case of a mirror, interposed between a percipient and a pillar, which reflects a numerically distinct but similar pillar. He rightly argues that the percipient does not see the pillar obscured or hidden by the mirror.
- 18 Dretske, *Seeing and Knowing*, pp. 50-4.
- 19 See Michael Dummett, "Symposium: Can An Effect Precede Its Cause?" *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954), 27-62, and "Bringing About the Past," *Philosophical Review* 73 (1964), 338-59.
- 20 Dummett, "Symposium: Can An Effect Precede Its Cause?" pp. 31, 33.
- 21 See Bertrand Russell, *The Analysis of Mind*, London: George Allen & Unwin Ltd., 1933, p. 89.
- 22 Peter Smith and O.R. Jones, *The Philosophy of Mind: An Introduction*, Cambridge: Cambridge University Press, 1988, p. 53.
- 23 *Ibid.*
- 24 See Lewis, "Veridical Hallucination and Prosthetic Vision," p. 245, for a statement of the causal theorist's view that S sees the scene before S's eyes only when the scene causes *matching* visual experiences in S as part of an appropriate pattern of counterfactual dependence.
- 25 D.F. Pears, "The Causal Conditions of Perception," *Synthese* 33 (1976), pp. 32-3.
- 26 Frank Jackson, *Perception: A Representative Theory*, Cambridge: Cambridge University Press, 1977, p. 46.



## Chapter 7

### Why Perceptual Experience Is Not Essentially Epistemic

#### 7.1 Simple Perceiving and Perceiving As

Epistemic accounts of perception maintain that perceiving essentially involves cognitive activity, such as judging, thinking, believing, knowing, interpreting, classifying or taking to be the case. Epistemic theorists hold: (1) that perceiving essentially involves the acquisition of either actual or potential beliefs or judgments about the external physical world; (2) that perception is *nothing but* the acquisition of either actual or potential beliefs or judgments about the external physical world; or (3) that perception essentially involves epistemic would-be judgment or belief looks of objects to percipients. Quinton, Sibley and Heil hold the first view, Armstrong and Pitcher hold the second view, and Vesey holds the third view. Epistemic theorists insist that S cannot perceive X without the occurrence of something analogous to an actual or would-be belief-event or belief-state.

Non-epistemic theorists deny that the analysis of perception requires reference to cognitive notions like judgment, thought, belief, knowledge or taking to be the case. They insist that S can perceive X, that X can look or appear some way to S, without S acquiring, or even being inclined to acquire, any judgments, knowledge or beliefs. Perception does not intrinsically, essentially or necessarily involve either actual or would-be judgments, beliefs or takings to be the case. There is no necessary or conceptual connection between perceiving and cognizing. "One who sees," as Warnock observes, "need not know anything at all."<sup>1</sup> Collins similarly explains that "knowledge is always external to perception per se,"<sup>2</sup> and that "to perceive is not, in itself, to know anything."<sup>3</sup>

While Dretske maintains that perceiving need not involve any *particular* beliefs, knowledge or judgments, Warnock maintains the stronger non-epistemic thesis that perceiving need not involve any beliefs, knowledge or judgments *whatsoever*. As a non-epistemic theorist, I hold that perception has a sensory core of uninterpreted, uninferred and unjudged phenomenal content. There are purely sensory experiences wholly free of any element of interpretation, inference, belief, judgment or taking to be the case, what Warnock, Dretske, Kneale, and Alexander all refer to as "simple seeing." By "simple perceptual experience," I mean experiential, rather than cognitive or conceptual,

awareness of items in the external physical world. Perception does not essentially involve recognition, identification, interpretation or classification of its objects, and need not involve any perceiving *that*, perceiving *as*, perceiving *as being*, or perceiving *to be*.

Because the term "acquaintance" is inevitably suggestive of a Russellian *cognitive* relation, non-epistemic theorists should probably speak of perceptual *apprehension*, or follow Broad in speaking of perceptual *prehension*, while rejecting Broad's view that all prehension is prehension *as*.<sup>4</sup> In speaking of perceptual experience as a direct awareness or apprehension of the external physical world, I do not mean to suggest that there is any essential element of cognition involved.<sup>5</sup> The perceptual apprehension which I propose is wholly non-epistemic. As a non-epistemic theorist, I choose not to characterize perception as the *discovery* of the existence and nature of external physical objects, preferring instead to speak of perception as the *experience of* external physical objects.

External physical objects cannot be presented to us in perceptual experience without being presented to us *in* a certain way. Objects of presentation must have a mode of being presented. There must be a content of presentation. But it does not follow that objects of presentation must have a mode of being presented *as being*, that the content of presentation must be a content *as of* such and such. While objects of presentation must be presented to us *in* a certain way, it does not follow that they must be presented to us *as being* a certain way. In order for S to perceive X, X must look or appear some way to S. But it does not follow that X must look or appear *to be* some way to S.

## 7.2 Epistemic Accounts of Perception

Epistemic theorists insist that perception is essentially conceptual, and thus cognitive, because perceiving entails either perceiving *that* such and such is the case, and thus taking to be the case, and so beliefs,<sup>6</sup> or perceiving something *as being* such and such, and thus the possession and application of concepts. Armstrong notes that belief *that* X is F requires possession of the concepts "X" and "F."<sup>7</sup> Since perceiving *that* X is F entails taking X *to be* F, and thus believing X *to be* F, we cannot perceive *that* X is F without possessing the concepts "X" and "F." We must possess the concepts of whatever properties we predicate when we perceive *that* such and such is the case.

Quinton is an epistemic theorist about perception in claiming that "One cannot be aware of something without knowing something about it, being aware *that* something is the case."<sup>8</sup> Heil is an epistemic theorist in regarding perception as "essentially the acquisition of beliefs,"<sup>9</sup> insisting that the acquisition of a belief about X is a necessary, but not sufficient, condition of seeing X. Although Heil explicitly rejects Armstrong's and Pitcher's view that perception is *nothing but* the acquisition of belief, he claims in an endnote that he is "tempted to say that a perceptual experience just is the process of information extraction--belief acquisition."<sup>10</sup>

Vesey maintains the *strong epistemic* thesis that nothing can be seen unless it is seen as something or other. He states that "'All seeing is seeing as.' In other words, if a person sees something at all it must look like something to him, even if it only looks like 'somebody doing something'."<sup>11</sup> To perceive X as F is to perceive X as instantiating or exemplifying the property F, which just is to apply the concept F to X, and concept application is a cognitive activity. Vesey's notion that all perceiving is perceiving as amounts to the view that all perceiving involves propositional representational content, and thus representation as *being the case*.<sup>12</sup> Vesey shows that he regards all perceptual representation as representation as *being* when he argues that "Whenever we see an object it looks like something, or looks to have some quality."<sup>13</sup> Representing X to have F just is representing X as *being* F. Non-epistemic theorists deny that perceptual representation essentially involves representing things as *being the case*.

Ziedins usefully contrasts "mere *experiential* awareness," or awareness of the environment without concepts, with "*cognitive* awareness," such as when we see an X as an X, "or at any rate as 'something or other over there in front of me.'"<sup>14</sup> For non-epistemic theorists, simple perceptual experiences consist of mere experiential awareness of external physical objects, awareness without any representation as, whether representation as *being* or representation as *having*. Since perceiving as consists of cognitive, rather than mere experiential, awareness, Vesey's thesis that all perceiving is perceiving as amounts to the view that all perceiving is *cognitive* or *epistemic*. If Vesey's epistemic would-be belief is an inclination to believe, and if we follow Armstrong in viewing an inclination to believe as simply "a thought that *presses towards* being a belief,"<sup>15</sup> then Vesey's thesis that all perceiving involves would-be belief looks of objects to percipients would entail that all perceiving involves thoughts which press towards being beliefs. Since perception would essentially involve thoughts, it would essentially be epistemic.

Like Vesey, O'Shaughnessy believes that all perceiving is perceiving *as*. He claims that "some examples of seeing-that are constitutive of visual experience. Thus, I can hardly see a scene without registering or seeing-that certain structural relations obtain....Clearly all seeing-of must involve some seeing-that."<sup>16</sup> Vesey's *strong epistemic* view that each thing seen must be seen *as* such and such may be contrasted with O'Shaughnessy's *weak epistemic* thesis that seeing requires only some element of seeing *as* or seeing *that*. Unlike Vesey's view, O'Shaughnessy's thesis does not require that each thing seen be seen *as* something or other.

Russell was an early critic of the view that we cannot experience an object without experiencing the object's relations to us. He argues that, when he is acquainted with an object, "the object itself is known to me without the need of any reflection on my part as to its properties or relations."<sup>17</sup> If we can be acquainted with an object without having to reflect upon any of its properties or relations, then we can be acquainted with an object without having to reflect upon its structural relations. We do not need to experience an object's relation to us, the fact that it is an object of experience *for* us, simply to experience the object.

Searle is an epistemic theorist in arguing that "whenever it is true to say that *x* sees *y* it must be true that *x* sees *that* such and such is the case."<sup>18</sup> Like Vesey's account, his view is *strongly epistemic* in maintaining, not simply that all seeing involves seeing *that*, but that each thing seen involves seeing *that* such and such is the case. Searle believes that "all (normal) seeing is *seeing as*, all (normal) perceiving is *perceiving as*,"<sup>19</sup> because seeing is perspectival and we always see objects under certain aspects and not others. To see under a certain aspect is to represent under a certain aspect to the exclusion of other aspects, and thus to have conditions of satisfaction. However, the fact that only the facing surfaces of opaque physical objects are presented to us does not mean that we must see those facing surfaces *as* such and such. The fact that we perceive only aspects of opaque physical objects does not entail that we perceive them under certain aspects in the sense that we perceive them *as being* such and such. That an opaque physical object is *F* to this perspective or point of view does not entail that we see it *as having F*, still less that we see it *as having F* to this perspective or point of view.

Many philosophers of perception believe that perceiving involves interpretation, and thus cognition, at every level of perceptual processing because they assume that, since perceptual systems are selectively responsive to certain features of the perceptual

stimulus, perception must be interpretative even at the earliest levels of perceptual processing. The mistaken assumption that the selective responsiveness of neurons in the visual cortex constitutes classificatory activity, together with the notion that classificatory activity is cognitive activity, leads to the mistaken notion that even the earliest levels of perceptual processing are essentially cognitive in nature. Goldman correctly observes that "What is fundamental to cognition is classification," but then goes on to speak of "the fundamental classificatory nature of perception,"<sup>20</sup> citing "*feature analyzers*" in the perceptual system such as edge detectors.

But what reason is there to believe that neural edge detectors *themselves* classify stimulus properties, as opposed to enabling their subsequent classification by higher-level cognitive processing systems? Why suppose that selective responsiveness in the visual cortex constitutes classification? Does litmus paper *itself* classify the substances it comes into contact with simply because it is selectively responsive to acids? Surely it is only cognizers *using* litmus paper to detect the presence of acids who classify anything. The litmus paper itself does not classify or interpret anything, and is thus not intrinsically cognitive. The selective responsiveness of the perceptual system is no more intrinsically classificatory, and thus cognitive, than litmus paper. Perceptual experience transduces only some of the stimulus properties, and is thus selective, without thereby being interpretative and cognitive.

### 7.3 Does Perceiving Entail Attending Or Noticing?

Many epistemic theorists have attempted to link the ability to perceive external physical objects to the capacity to notice or attend to them. O'Shaughnessy claims that "Perception is an experience; of the kind of attention or noticing."<sup>21</sup> Sibley argues that, as far as ordinary talk is concerned, S's seeing X requires more than simply X's looking some way to S. In order for S to see X, S must additionally attend to, and thus acquire some beliefs about, X. He states that "it is most common to say that whatever we did not notice or give any attention to *we did not see*."<sup>22</sup> Sibley reasons that, since S cannot see X without paying some degree of attention to X, and since paying attention to something entails acquiring some belief or other, seeing will necessarily or essentially involve acquiring some belief or other. He concludes that in every instance of perception the percipient must acquire a belief about something.

Unlike Sibley, I find nothing at all unusual in saying that S perceived X even though S in no way attended to X, and do not believe that being incapable of attending



to X is to be incapable of perceiving X. I therefore reject Sibley's view that "We would surely regard it as conclusively settled that S could in no sense see D (and perhaps that D was not in his visual field), if at a given time we thought he could not, by redirecting his attention, notice, glimpse or spot D."<sup>23</sup> Since I believe that we can perceive what we in no way notice or attend to, noticing or attending cannot be a necessary condition of perceiving. There is nothing at all contradictory in saying that S saw D even though S could not, by redirecting his attention, have noticed, or be brought to notice, D.

Like Sibley, Leahy argues that there can be no seeing where there is no capability of noticing.<sup>24</sup> Since Leahy holds that S's capability of noticing X itself requires (1) S's knowing what an X is and (2) X being such that S's eyes are acute enough to pick out Xs,<sup>25</sup> S's seeing X implies the capability visually to identify or recognize X as an X, that S cannot see X if S is wholly incapable of visually noticing or recognizing that X is an X. Leahy's account of seeing is epistemic because he maintains both that S cannot see X unless S is capable of noticing X and that S is not capable of noticing X unless S knows what Xs are. On his analysis, simply to see X requires knowledge of Xs, so seeing is essentially an epistemic or cognitive activity.

But there is surely a sense in which we can see, for example, a chameleon camouflaged in surrounding foliage, seeing what are in fact parts of a chameleon, such as its legs, without ever being able to notice the chameleon, and thus without ever being able to notice *that* there is a chameleon there, even with extensive coaching by a chameleon expert. It is not simply that we *do not*, in fact, notice the chameleon. Rather, we *cannot* notice the chameleon no matter how hard we look and no matter how much coaching we receive. Even when we are told *that* there is a chameleon there before us and are told *where* the chameleon is located in our visual field, we remain wholly incapable of seeing where the chameleon begins and the surrounding foliage ends. Our perfect description of the patterns of colours and shapes which constitute the visual appearance of the chameleon's legs shows clearly that we see the chameleon's legs even though we are wholly incapable of noticing *that* there is a chameleon there before us. So the capability of noticing *that* there is a chameleon there before us cannot be a necessary condition of simply seeing the chameleon.

Epistemic theorists like Sibley and Leahy attempt to link perception to *attention*, insisting that S cannot perceive, and thus be perceptually aware of, X unless S perceptually attends to X. Vesey insists that merely gazing at an object, or having an object before one's open eyes, does not constitute any evidence for beliefs. Only seeing

an object as such and such, which requires attending to the object, can justify perceptual beliefs about the object. If all seeing is seeing as, meaning, not simply that all seeing involves some element of seeing as, but also that nothing can be seen unless it is seen as something or other, and if seeing as requires attending, then whatever is not attended to cannot be seen.

But surely it is mistaken to make attention a necessary condition of seeing. Non-epistemic theorists distinguish perceptually experiencing from perceptually attending or noticing, maintaining that many things in our visual periphery are perceived but never perceptually attended to or noticed. Vesey's notion that whatever is seen is visually attended to is inconsistent with our first-hand experience of peripheral vision, where there is usually no visual attention. I believe that we must allow for perceptual awareness without attention simply to make sense of perceptually noticing something. For we cannot notice what we are already attending to. We can, of course, notice a feature or property of something we are already perceptually attending to, but we cannot notice X itself if we are already perceptually attending to X.

The view that seeing requires the capability of noticing is plainly false if the capability of noticing is construed as either (1) the capability of identifying or recognizing what is seen, or (2) the capability of identifying or recognizing the edges of what is seen. In denying that seeing requires either actual or possible identification of the edges of what is seen, I am opposed to the view advanced by Dretske and others that seeing requires actual discrimination of the objects of perception from their background or surroundings. Seeing does not even require the capability of such discrimination.

But the principle that seeing requires the capability of noticing is true if the capability of noticing is interpreted merely as the capacity to notice the sudden absence of what is perceived. Simply to see X, S need not have the capacity to notice X by a suitable redirection of attention. But S must have the capacity to notice X's sudden absence in order to see X. A necessary condition of S's perceiving X is that X's sudden absence would make a difference to S's perceptual experience. S cannot notice X's sudden absence if X's presence makes no difference to S's perceptual experience. We perceive, not what we could or would notice by a suitable redirection of attention, but rather what we could or would notice if it were suddenly to disappear. There is nothing at all odd in saying that S saw X even though S was wholly incapable of noticing X. S's perfect description of a camouflaged X would suggest that he perceived X even though he was wholly incapable either of noticing X as an X or noticing X as an object distinct

from its surroundings. But we could not plausibly say that S saw X if S were incapable of noticing X's sudden absence. As it happens, S might fail to notice X's sudden absence if S is momentarily distracted. But we could not plausibly say that S saw X if S were incapable of noticing X's sudden absence, even when not distracted. I conclude that perceiving does not essentially involve actually noticing or attending to the objects of perception and that perceiving requires only the capability of noticing the sudden absence of the objects of perception, and not the capability of noticing the objects of perception by a suitable redirection of attention.

#### 7.4 Is Perceiving Essentially Conceiving?

Begging the central question against non-epistemic theorists, Runzo argues: "That concept possession is a necessary condition for perceptual experience can also be seen by considering how the possession of different concepts results in different perceptual experiences."<sup>26</sup> It simply begs the question at hand to assume that a difference in concepts results in a difference in perceptual experience itself, as opposed to a difference in the interpretation or cognitive utilization of one and the same perceptual experience.

Peacocke's representational content of perceptual experience requires possession and application of concepts since the representational content of perceptual experience is what, taking our experience at face value, and in the absence of judgments or beliefs to the contrary, we would judge to be the case, and judgments are themselves judgments of things falling under certain concepts. We cannot ascribe or predicate properties which we do not grasp or possess. Peacocke argues that a perceptual experience cannot represent X as *being* F if the percipient is incapable of grasping the concept of "F."<sup>27</sup>

To counter the radical conceptualization of perception, the notion that perceptual experience essentially involves the possession and application of concepts, non-epistemic theorists have only to show that at least some perceiving occurs in the absence of relevant concepts. If at least some external physical objects can look or appear to us without plausibly looking or appearing to us as *being* a certain way, then perceiving will not essentially involve perceiving *that*, perceiving *as* or perceiving *to be*, and will thus not essentially be epistemic. If perceiving need not involve perceiving *as*, and thus perceiving *as* falling under certain concepts, perceptual experience need not be conceptual, and thus cognitive. The possibility of perceiving in the absence of relevant concepts, and thus relevant beliefs, renders belief-based analyses of perception

problematic. This difficulty applies, not just to infants and lower animals, but also to adult humans who lack the concepts required to entertain relevant perceptual beliefs.

I believe that there are looks or appearances of external physical objects to percipients which involve neither actual nor would-be judgments or beliefs, and thus do not require possession and application of concepts. No actual judging or believing results, and no inclination to judge or believe is experienced since no judgment or belief is held in check by contrary judgments or beliefs. In his later writings, Armstrong speaks of "inhibited belief" rather than "inclination to believe."<sup>28</sup> In Armstrong's later jargon, there are looks or appearances of external physical objects to percipients which are not even inhibited beliefs. Examples of such wholly non-epistemic looks or appearances of objects to percipients fall into two broad categories: (1) looks or appearances which we can in no way discriminate or notice, and (2) looks or appearances which we can discriminate or notice, but which happen not to be discriminated or noticed.

The following example illustrates looks or appearances of objects to percipients which cannot be discriminated or noticed, and so cannot be the objects of any beliefs or inclinations to believe. Sitting at home late at night, we notice the sound of something stopping. We later learn that the sound which we heard was the collapse of the central heating water pump after years of reliable service. The sound which the water pump made over the years was so faint as to be ordinarily unnoticeable. It blended in completely with the background noises of the home. No amount of effort on our part would have resulted in our discriminating or differentiating the sound of the water pump. But we still heard the sound of the water pump stopping, hearing the difference which the cessation of the sound made to the overall background noises of the home. Although the sound itself was neither discriminable nor noticeable over the years, the cessation of the sound that evening was both discriminable and noticeable. But we could not have heard and noticed the cessation of the sound if we had not heard the sound all along. In order to notice a change, we must notice a difference, and we cannot notice a difference in the sound unless we heard the sound all along. The fact that we *could not* notice or attend to the sound before does not entail that we did not hear it. We heard the sound of the water pump all along, even though we could not discriminate, notice or attend to the sound, because the presence of the sound made a difference to our aural experience such that we noticed its sudden absence.

It is clear that we heard the sound of the water pump all along, even though we could not discriminate or notice the sound. If we could not discriminate or notice the

sound of the water pump, then we surely could not have had any beliefs about the sound, not even inclinations to believe which were held in check by other, contrary beliefs. No actual judgments or beliefs about the sound could have been involved, and no inclinations to judge or believe could have been experienced.

As an example of looks or appearances to percipients which we can, in fact, discriminate or notice, but which happen to go undiscriminated or unnoticed, consider the following case. Staring idly out of our office window at a building across the street, we notice a light in one of the many windows going out. We could have discriminated or noticed the light before, and formed appropriate beliefs or judgments about the light. But as it happened, the light in the window was only one of many lights in windows, and neither the lights nor the building itself held any special interest for us. We were, after all, only gazing idly, not looking for something in particular. Although we could easily have discriminated and formed beliefs about the light in the window, there was no need or point in our doing so. Consequently, no actual judgments or beliefs about the light in the window were formed, and no inclinations to judge or believe something about the light were experienced, inclinations which would have been full-blown judgments or beliefs but for contrary judgments or beliefs. What actual or would-be beliefs could we reasonably be said to have acquired about the light before we saw it going out? But we nonetheless noticed the light in the window going out, and we could not have seen and noticed the light going out if we had not seen the light in the window all along. The fact that we *did not* notice or attend to the light before does not entail that we did not see it. We saw the light in the window all along, even though we did not discriminate, notice or attend to the light, because the presence of the light made a difference to our visual experience such that we noticed its sudden absence.

Once again, it is obvious that we saw the light in the window all along while gazing idly out of our office window, even though we did not, in fact, discriminate or notice the light. If we did not discriminate or notice the light in the window, then we surely did not form any actual beliefs, or experience any inclinations to believe something, about the light.

Another way of isolating a wholly non-epistemic species of perception is to appeal to cases in which the percipient lacks concepts required to form relevant perceptual beliefs or judgments, but nonetheless perceives. Anyone who has visited high-altitude communities such as those found in the Peruvian Andes is familiar with the sensation of gasping for breath in the thin air. We perceive the thinness of the air just as



much as we perceive its temperature or dryness. But in order to perceive the difference in thickness between sea-level and high-altitude air, we must have been perceiving the thickness of sea-level air all along. Yet, barring knowledge of thermodynamic principles acquired in science classes, we would presumably have no concept of thin air, and thus no correlative concept of thick air, until we had our first exposure to thin air. But without the concept of thick air, we could not have acquired any beliefs about the thick air at sea level. So although we perceived the thickness of sea-level air all along, we could not form any beliefs or judgments about the thickness of the air. Our perception of the thickness of sea-level air thus seems to be entirely non-epistemic. Analogous arguments can be developed for our perception of the dryness or pressure of the air.

The absence of any necessary or conceptual link between perceiving and judging or believing can be established through more fanciful thought experiments. Imagine an unfortunate creature who lives in a world in which absolutely everything physical emits light. Since his eyelids themselves emit light, he is subjected to light even when he closes his eyes. A creature who never once experienced darkness would presumably have no concept of darkness, and consequently no correlative concept of lightness. The presumption here is that perceptual experience of lightness and possession of the concept of negation are together insufficient for possession of the concept of darkness. Not having the concept of lightness, the creature could not form beliefs or judgments about the lightness which, in his world, he could not help but perceive.

#### 7.5 Does Perceiving Essentially Involve Epistemic Looks Or Appearances?

Contemporary philosophers of perception distinguish between phenomenal, epistemic and comparative senses of "looks" or "appears." Epistemic theorists like Armstrong, Pitcher, Heil and Roxbee Cox all attempt to eliminate phenomenal looks or appearances by reducing them to either epistemic or comparative looks or appearances. Vesey distinguishes three different senses of "looks": (1) a measurable, perspective-determined sense of "looks," the optical look of an object to a perspective or point of view; (2) a tentative-opinion-indicating sense of "looks"; and (3) an epistemic, would-be judgment or belief sense of "looks."<sup>29</sup> The epistemic look of an object to a percipient is identified by reference to what, on looking at the object, the percipient *would* judge, believe or take it *to be* if the percipient had no reason to think otherwise. The epistemic look or appearance of an object to a percipient is thus identified by reference to *would-be* judgments or beliefs, inclinations to judge or believe which would have been full-blown judgments or beliefs but for contrary judgments or beliefs. It is the sense in which

Müller-Lyer lines continue to look unequal to us, even though they look equal to us in an optical, perspective-determined sense of "looks" and we are not of the opinion that the lines are unequal in length, which Vesey attempts to capture by speaking of the epistemic would-be judgment or belief look of the lines. Müller-Lyer lines epistemically look unequal in length because, on looking at them, we *would* judge or believe them *to be* unequal if we had not known that they were actually equal in length.

Vesey insists that epistemic would-be judgment or belief looks of objects to percipients are necessary to understand the connection between seeing and believing. He argues that perceiving could not be a ground or reason for perceptually believing things about the external physical world if there were no epistemic looks or appearances, if we did not perceive things *as being* such and such. Vesey reasons that only what is itself either true or false of the external physical world can ground or justify our perceptual beliefs or judgments. The epistemic look of an object to a percipient is "a reference to what serves to justify one's opinion."<sup>30</sup> Only what has a structure amenable to inference can serve to justify perceptual inferences. Perceiving cannot be a reason for believing unless its analysis involves believing. However, Vesey argues from the *weaker* notion that "perception would not be how we find things out about the world if there were not epistemic appearances"<sup>31</sup> to the *stronger* view that nothing can be perceived unless it is perceived *as* something or other, and thus has an epistemic appearance, without offering any formal argument for the transition. He thus moves without support from the plausible view that there must be epistemic looks or appearances of objects to percipients to the implausible view that everything perceived must have an epistemic look or appearance, and that all perceiving is thus cognitive.

Corresponding to the different senses of "looks" or "appears," there are different senses of "to perceive." Vesey explains that perceiving *as* corresponds to the epistemic look or appearance of an object to a percipient.<sup>32</sup> S's perceiving X *as* F *just is* X's epistemically looking or appearing F to S, that is, taking her perceptual experience at face value, S would judge or believe X *to be* F if she had no reason to judge or believe otherwise. The non-epistemic theorist's denial that all perceiving is perceiving *as*, and thus the denial that all perceiving is epistemic, is thus the rejection of the view that everything perceived has an epistemic would-be judgment or belief look or appearance to the percipient.

Vesey insists that "What an object looks like to somebody is what, on looking at it, that person would take it to be, if he had no reason to think otherwise."<sup>33</sup> He thus

fails to allow for looks or appearances of objects to percipients in which there is absolutely no inclination to judge or believe. Philosophers who insist that all perceiving is perceiving *as*, that perceiving entails at least epistemic looks or appearances of objects to percipients and thus would-be judging, believing or taking to be the case, are epistemic theorists since they maintain that there is a necessary or conceptual connection between perception and knowledge or judgment, albeit a necessary connection between perceiving and *would-be* knowing or judging. They believe that experience and judgment are intimately connected because what an object looks like to someone is what that person would judge that object *to be* in the absence of a reason to judge otherwise.

But it is important to recognize that there is another way that an object can look to a percipient, and not just to a perspective in space, one which involves neither *actual* judgments, beliefs or takings to be the case nor *would-be* judgments, beliefs or takings to be the case. As a non-epistemic theorist, I believe that there is a genuinely perceptual look or appearance of objects to percipients which is in no way epistemic, and thus not analysable in terms of either actual or would-be judgments, beliefs or takings to be the case. As the various examples cited in the previous section illustrate, there are looks or appearances of objects to percipients in which no *actual* judgments or beliefs are involved, and no judgments or beliefs are held in check by contrary judgments or beliefs, no inclinations to judge or believe which would have been full-blown judgments or beliefs but for contrary judgments or beliefs. It is the sense of looking or appearing to a percipient despite the fact that there are not even would-be judgments or beliefs which I mean to capture by speaking of the non-epistemic look or appearance of an object to a percipient.

Vesey argues that it is only by *interpreting* our sense-impressions in the light of past experience that we arrive at *epistemic* appearances, looks which are true or false *of*, and not simply true or false *to*, their objects.<sup>34</sup> His thesis that all seeing is seeing *as*, that all seeing involves epistemic looks of objects to percipients, thus amounts to the view that all seeing involves some element of interpretation. But since epistemic looks or appearances are interpreted sense-impressions, and since perceptual experiences do not essentially involve interpretation, perceptual experiences need not involve epistemic looks or appearances, and thus need not be epistemic. Perceiving need not be a matter of perceiving *as being* the case if at least some perceiving has absolutely no element of interpretation.

The minimum commitment of the *non-epistemic* theorist is generally regarded as the view that perceiving does not entail any *actual* judgments, knowledge or beliefs, that S can perceive X without acquiring *actual* judgments, knowledge or beliefs about X. The minimum commitment of the *epistemic* theorist is then held to be the view that S cannot perceive X without acquiring *actual* judgments, knowledge or beliefs about X. S's acquiring a mere inclination to judge, know or believe something about X, without acquiring *actual* judgments, knowledge or beliefs about X, is held to be an instance of non-epistemic perception.

But since an inclination to judge, know or believe is judgment, knowledge or belief which is held in check by contrary judgments, knowledge or beliefs, even inclinations to judge, know or believe essentially involve the possession and application of concepts, and are thus epistemic. Since concept possession and application is essentially an epistemic activity, and since I wish to defend a non-epistemic analysis of perception, I construe the non-epistemic thesis as the view that perceiving does not require even the acquisition of inclinations to judge, know or believe. X need not have an epistemic would-be judgment or belief look to S simply for S to perceive X. S's perception of X requires neither *actual* judgments, knowledge or beliefs nor *inclinations* to judge, know or believe. In order for S to perceive X, X need not have either a tentative-opinion-indicating look to S or an epistemic would-be judgment or belief look to S.

By a "strong non-epistemic analysis of perception," I therefore intend something considerably more restrictive than other non-epistemic theorists. Pappas, for example, regards *strong epistemic* accounts as analyses of perception in terms of the acquisition of *knowledge*, and *weak epistemic* accounts as analyses of perception in terms of the acquisition of *beliefs*.<sup>35</sup> A *strong non-epistemic* account would thus maintain that perception does not essentially involve the acquisition of *knowledge*, while a *weak non-epistemic* account would hold that perception need not involve the acquisition of *beliefs*. But by a "strong non-epistemic analysis of perception," I mean an analysis which maintains that perception does not essentially involve either *actual* acquisition of knowledge or belief or even *would-be* acquisition of knowledge or belief, and thus does not even involve inclinations to know or believe which are held in check by contrary knowledge or beliefs.

Notes

- 1 G.J. Warnock, "Seeing," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 58.
- 2 Arthur W. Collins, "The Epistemological Status of the Concept of Perception," *Philosophical Review* 76 (1968), p. 437.
- 3 *Ibid.*, p. 456.
- 4 See C.D. Broad, "Some Elementary Reflections on Sense-Perception" and "The Theory of Sensa," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 43.
- 5 Compare Warnock, "Seeing," p. 58.
- 6 See Roderick M. Chisholm, "The Evidence of the Senses," in *Epistemology, Philosophical Perspectives*, volume 2, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1988, p. 74.
- 7 D.M. Armstrong, *A Materialist Theory of the Mind*, London: Routledge & Kegan Paul Ltd., 1971, p. 210.
- 8 Anthony M. Quinton, "The Problem of Perception," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 510.
- 9 John Heil, "Seeing is Believing," *American Philosophical Quarterly* 19 (1982), p. 232.
- 10 *Ibid.*, p. 238.
- 11 G.N.A. Vesey, "Seeing and Seeing As," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Doubleday & Company, Inc., 1965, p. 73.
- 12 See Christopher Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, Oxford: Oxford University Press, 1983, p. 50, for the view that perceiving as is perceptual experience with representational content, and p. 7 for the view that the representational content of perceptual experience is the way that experience presents the world as being.
- 13 Vesey, "Seeing and Seeing As," p. 83.
- 14 R. Ziedins, "Knowledge, Belief and Perceptual Experiences," *Australasian Journal of Philosophy* 44 (1966), p. 70.
- 15 D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, pp. 86-7.
- 16 Brian O'Shaughnessy, "The Diversity and Unity of Action and Perception," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992, p. 222.



- 17 Bertrand Russell, *Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984, p. 39.
- 18 John R. Searle, *Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987, p. 40.
- 19 John R. Searle, *The Rediscovery of the Mind*, Cambridge: The M.I.T. Press, 1992, p. 133.
- 20 Alvin I. Goldman, "Perceptual Objects," *Synthese* 35 (1977), p. 277.
- 21 O'Shaughnessy, "The Diversity and Unity of Action and Perception," p. 222.
- 22 F.N. Sibley, "Analysing Seeing I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 95.
- 23 *Ibid.*, p. 103.
- 24 Michael P.T. Leahy, "Seeing and What We See," *Mind* 82 (1973), pp. 426, 429.
- 25 *Ibid.*, p. 429.
- 26 Joseph Runzo, "The Radical Conceptualization of Perceptual Experience," *American Philosophical Quarterly* 19 (1982), p. 210.
- 27 Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, pp. 19-20.
- 28 D.M. Armstrong, "Max Deutscher and Perception," *Australasian Journal of Philosophy* 41 (1963), p. 246.
- 29 G.N.A. Vesey, "Analysing Seeing II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 134.
- 30 *Ibid.*, p. 135.
- 31 G.N.A. Vesey, *Perception*, Garden City: Doubleday & Company, Inc., 1971, p. xi.
- 32 Vesey, "Analysing Seeing II," p. 136.
- 33 Vesey, "Seeing and Seeing As," p. 69.
- 34 G.N.A. Vesey, "Chairman's Remarks," commenting on Richard L. Gregory's "Perceptions as Hypotheses" and G.E.M. Anscombe's "Comment on Professor R.L. Gregory's Paper," in *Philosophy of Psychology*, S.C. Brown (ed.), London: The Macmillan Press Ltd., 1974, p. 229.
- 35 George S. Pappas, "Seeing<sub>e</sub> and Seeing<sub>n</sub>," *Mind* 85 (1976), p. 171.

## Chapter 8

### Why Perceptual Experience Is Not Intrinsically Intentional

#### 8.1 Intrinsically Intentional and Intrinsically Propositional

Most contemporary philosophers of perception believe that perceptual experience is intrinsically, and thus essentially, intentional. Since the term "intentionality" encompasses a broad spectrum of notions and phenomena, philosophers often mean quite different things when they speak of "the intentionality of perception." There is a general consensus, however, that the intentionality of perceptual experience consists in its capacity to refer to something beyond itself. Following Brentano, most contemporary philosophers regard reference, directedness or aboutness as the defining characteristic of intentionality. Since intentionality with an *s* is a property only of intentional states with *propositional* contents, there may be intentional attitudes which are not propositional attitudes, and intentional contents which are not propositional contents. The intentionality of such non-propositional attitudes and contents would be wholly a function of their reference to something beyond themselves. Intentional attitudes and contents do not entail, but are entailed by, propositional attitudes and contents. The notion that perceptual experiences are essentially propositional in structure amounts to the view that they are intrinsically intentional because it entails that perceptual experiences essentially take that-clauses as their objects, and that-clauses, as Burge notes, are themselves intentional.<sup>1</sup> While not all intentional contexts need be propositional contexts, every propositional context is an intentional context because of the intentionality of that-clauses.

Over-generalizing intentionalistic belief/desire psychology, and burdened by an unfortunate linguistic metaphor, contemporary philosophers of perception insist that perceptual experiences are essentially *of*, *about* or *directed at* objects which may fail to exist, and that perceptual experiences represent whole states of affairs, representing things as *being* the case in the external physical world. But the objects of simple perceptual experiences have existence conditions which are inconsistent with intentional accounts of perceptual experience. As a non-epistemic theorist, I deny that perceptual experiences essentially involve either propositional representational contents expressible only in non-extensional terms or reference to the objects or contents of perceptual experience. Since perceiving need not involve either actual or would-be judging,

knowing, believing, or taking to be the case, it need not be propositional, and thus intentional.

Most philosophers who maintain that perception is intrinsically intentional are motivated, not simply by the idea that perceptual experiences are essentially referential, but also by the view that perceptual contexts are essentially intensional contexts. Following Anscombe,<sup>2</sup> they distinguish material from intensional uses of perceptual verbs, insisting that perceptual verbs can take intentional objects characterized by three features: (1) the possible non-existence of the objects, and thus the failure of existential generalization; (2) the possible failure to preserve the truth of statements when co-referring descriptions of the objects are substituted, and thus the non-substitutivity of co-referring expressions *salva veritate*; and (3) the possible indeterminacy of the objects. Perceiving *that*, perceiving *as*, perceiving *as being*, perceiving *as having* and perceiving *to be* are all examples of intensional contexts since substitution of co-referring terms in the object position may fail to preserve the truth of statements. To perceive an X as F or as *being* F, when F is G, is not necessarily to perceive an X as G or as *being* G. In contrast, perceiving which takes a direct object is an extensional context because it allows substitution of co-referring terms *salva veritate*. To perceive an X which is F, when F is G, is to perceive an X which is G. While at least some intentional analyses of perception are motivated by purely referential considerations, the vast majority of intentional accounts of perception are driven by the assumption that perceptual experiences are essentially propositional structures requiring non-extensional, or intensional, expression.

In an early critique of the applicability of intentionality to perception, White argues that, when it is true that we perceive what looks *to be* or looks *like* X, then *none* of Anscombe's three features of intentional objects obtains.<sup>3</sup> For what is said to be perceived, what looks *to be* or looks *like* X, cannot be indeterminate or fail to exist, and "what looks *to be* or looks *like* X" remains true, when it is true, under substitution of co-referring terms for what is perceived. Simple perceptual experiences are not intentional because they entail the determinate existence and causal action of what is experienced. Alleged instances of perceiving what is not there to be perceived are either: (1) not genuine cases of perceiving at all, but instead instances of mere seeming to perceive; or (2) cases of perceiving something which happens to look like such and such. As Taylor expresses it: "When I think I see something that is not there before me, either (i) I see something else and take it for what it is not, or (ii) I take myself to be seeing something when I am not."<sup>4</sup> Simple perceptual representation, unlike propositional perceptual

representation, is an extensional context because verbs of simple perceptual experience admit of existential generalization and carry ontological commitments. Dretske explains that simple non-epistemic perception is "regulated" by an "existence condition," and thus carries an "existential implication."<sup>5</sup> Simple perceptual experiences have what Armstrong calls "existence-grammar." The "existence-grammar" of "S perceives X" is a function of its "causal grammar."<sup>6</sup>

Simple perceptual experiences are also not intentional because they allow truth-preserving substitution of co-referring expressions in the object position, and are thus extensional contexts. Simple non-epistemic perceptual experiences satisfy the principle of substitutivity, what Dretske calls the "principle of inference."<sup>7</sup> Warnock similarly claims that it is, in general, "perfectly valid to argue: 'A sees X; X is P; so A sees P'."<sup>8</sup> If we simply perceive an X which is F, when F is G, then we perceive an X which is G whether we realize it or not. Like White, Robinson and Collins,<sup>9</sup> I believe that any adequate characterization of perceptual experience must appeal to extensional terms. I thus oppose the notion that perceptual experience can be properly characterized in wholly intensional terms, a position which Robinson labels "the intentionalist viewpoint."<sup>10</sup>

The question whether the content of perceptual experience is essentially intensional depends upon whether the content can only be expressed in non-extensional ways, that is, in terms of directedness onto meanings or propositions. Since I believe that the content of simple perceptual experiences can be expressed in fully extensional terms, without appealing to directedness onto meanings or propositions, I conclude that the content of perceptual experiences is not essentially intensional. Perceptual experiences essentially have content, but this content need not be semantic in the sense of involving meaning. Since there can be no meaning without interpretation, and since perceptual experiences do not essentially involve interpretation, perceptual experiences are not essentially semantic, and thus need not have content expressible only in intensional terms.

Any attempt to undermine the intrinsic intentionality of perceptual experience by undermining its intrinsic propositional structure will of course do nothing to undermine intentional analyses of perception which are purely referentially motivated. Intentional accounts of perception driven solely by referential considerations can only be undermined by challenging the assumption that perceptual experiences are intrinsically referential. The comments on reference which follow are thus intended to apply both to

intensionally and to referentially motivated intentional accounts of perception, while the following remarks on facts, that-clauses, predication, truth-evaluability and meaning are intended to apply only to intensionally, and thus propositionally, motivated intentional analyses of perception.

## 8.2 Perceptual Objects Versus Perceptual Contents

Philosophers distinguish perceptual objects from perceptual contents, maintaining that the object of perceptual experience is the thing which is experienced, while the content of perceptual experience is the way that thing is experienced. The object of perceptual experience is thus *what* is experienced, while the content of perceptual experience is *how* it is experienced. The object of perceptual experience is the *thing* which is presented, while the content of perceptual experience is its *mode of presentation*. Many contemporary philosophers follow Meinong in distinguishing object from content by the fact that the object of a presentation can fail to exist but not its content. For externalist direct realists, the content of perceptual experience *just is* the object of perceptual experience as it is given in experience.

By "content of perceptual experience," most contemporary philosophers mean "propositional representational content," content which represents whole states of affairs in the external physical world, and thus represents the world *as being* a certain way.<sup>11</sup> Perceptual experiences have propositional representational content when they specify how the external physical world would have to be in order for the content to be veridical, correct or satisfied. But if perceptual experiences do not essentially specify such veridicality or satisfaction conditions, then they do not essentially have propositional representational content. Peacocke explains that "The representational content of a perceptual experience has to be given by a proposition, or set of propositions, which specifies the way the experience represents the world to be."<sup>12</sup> But if perceptual experiences do not essentially represent things *to be* the case, then perceptual experiences need not have a propositional structure. Since I do not believe that perceptual experiences essentially represent whole states of affairs in the external physical world, representing the external physical world *as being* a certain way, I do not believe that perceptual experiences essentially have propositional representational content. But this does not mean that simple perceptual experiences do not essentially have content, or even representational content.



Vesey and Peacocke carefully distinguish the content of perceptual experiences from the content of any judgments which arise as a result of having perceptual experiences.<sup>13</sup> Perceptually experiencing need not involve perceptually judging. But Peacocke's *representational content* of perceptual experience, its propositionally representing things *as being* the case, which is identified by reference to what, taking the experience at face value, the percipient would judge the objects *to be* in the absence of countervailing beliefs,<sup>14</sup> amounts to Vesey's *epistemic look* of an object to a percipient, which is identified by reference to what the percipient would judge the objects *to be* if he had no reason to judge otherwise.<sup>15</sup>

Both the *representational content* of perceptual experiences and the *epistemic look* of an object to a percipient are identified by reference to *would-be judgments*, or *inclinations to judge*. Peacocke's notion that propositional representational content is intrinsic to perceptual experiences is thus related to Vesey's view that perceiving essentially involves epistemic looks of objects to percipients. Since the notion that perceptual experiences essentially have propositional representational content is tied to the idea that all perceiving is perceiving *as*, non-epistemic theorists deny that perceptual experiences essentially have representational content in Peacocke's propositional sense. The notion that perceptual experiences intrinsically have propositional representational content, essentially representing things *as being* the case, is opposed to the view that there are simple, non-epistemic perceptual experiences wholly free of any actual or would-be judging, believing or taking to be the case.

Peacocke explains that the representational content of perceptual experiences can only be constructed from concepts the percipient possesses.<sup>16</sup> The percipient must grasp the way that his perceptual experiences represent the external world *as being*. But since concept possession and application is an epistemic activity, non-epistemic theorists conclude that perceptual experiences need not have representational content. The non-epistemic theorist's denial that perceptual experiences essentially involve at least epistemic looks of objects to percipients is related to the denial that perceptual experiences essentially have representational content. While the notion that perceptual experiences essentially have representational content, propositionally representing things *as being* the case, does not entail perceptual representationalism, it does entail the cognitive activity of concept possession and application, and thus precludes non-epistemic perception. Since non-epistemic theorists believe that there is a species of perceiving which in no way involves the possession and application of concepts, namely,

simple perception, they conclude that perceptual experiences do not essentially have representational content, propositionally representing things *as being* or *to be* the case.

Although most contemporary philosophers of perception reserve the term "content" for intentional, propositional representational content, identifying "representational content" with "intentional content,"<sup>17</sup> Lurie and Lowe sensibly recognize a non-intentional and non-propositional, merely phenomenal or qualitative *content* of visual experience, a content which does not involve representing things *as being* the case.<sup>18</sup> While all perceptual content is representational content, not all representational content need be propositional representational content, a content which represents things *as being* the case. Perceptual experiences can be contentful even though they do not perceptually represent their objects *as being* certain ways, or, what amounts to the same thing, they do not involve any actual or would-be judging, believing or taking to be the case. Simple perceptual experiences have a purely phenomenal or qualitative content, a representational content free of any propositional representing *as being* the case. Reminiscent of Russell's view that the relation of acquaintance is merely the converse relation of the relation of presentation, McGinn claims that "perceptual representation is the converse of perceptual presentation."<sup>19</sup> But if perceptual representation is simply the converse of perceptual presentation, then, just as things can be perceptually *presented* to us without having to be presented *as being* a certain way, things can be perceptually *represented* by us without having to be *represented as being* a certain way.

Corresponding to non-propositional perceptual presentation, that is, perceptual presentation without presentation *as being* the case, or perceptual presentation in the absence of either actual judgments or beliefs or epistemic would-be judgment or belief looks, there is both non-propositional perceptual representation and non-propositional perceptual content. The representational content of simple perceptual experiences is neither intentional nor propositional in structure. S's perceptual experience non-propositionally perceptually represents X to S when S is directly perceptually confronted by, or in immediate perceptual contact with, X. Since I disagree with Searle that talk of perceptual experiences as representations is "almost bound to lead to the representative theory of perception,"<sup>20</sup> I will speak both of presentational and of representational contents of perceptual experience, acknowledging non-propositional and non-intentional perceptual representations as well as propositional and intentional perceptual representations. Simple perceptual experiences involve an iconic, non-propositional and non-intentional, and thus non-semantic, species of perceptual representation.

Perceptual experiences essentially present the external physical world to the percipient, and thus represent the external physical world. But since perceptual experiences need not involve presenting *that* such and such is the case in the external physical world, they need not involve representing *that* such and such is the case. Peacocke believes that propositional representational content is intrinsic to perceptual experiences, and that experiences which differ in their representational content, differing in the way that they represent things *as being*, must differ phenomenologically, and thus be type-distinct experiences.<sup>21</sup> While Peacocke regards propositional representational properties of perceptual experiences, properties which represent things *as being* the case, as *intrinsic to* perceptual experiences, I believe that propositional representational properties are a consequence of simple perceptual experiences interacting with independent, higher-level cognitive systems capable of generating conceptual content. I therefore view propositional representational properties as extrinsic, and thus inessential to, perceptual experiences themselves. Propositional representational properties and content are not intrinsic to simple perceptual experiences, and thus do not contribute to make those experiences the experiences they happen to be.

From the fact that we cannot perceptually experience something without experiencing it *in* a certain way, it does not follow that we must experience it *as being* a certain way. Corresponding to simple perceptual presentation, there is perceptual representation with no actual or would-be taking *to be* the case. The content of simple perceptual experiences is how things seem to us in our perceptual experiences, not how things seem to us *to be*. Perceptual experience can present an X which is F without having to present anything *as being* F or even *as being* F-looking.

For epistemic theorists, the intentional propositional structure of perceptual experience is a function of the intentional propositional form of either the epistemic would-be judging or believing looks of objects to percipients or the beliefs or inclinations to believe the acquisition of which certain epistemic theorists insist is constitutive of perceiving. By denying that all perceiving is perceiving *as*, and rejecting judgment- and belief-based reductions of perceiving, I avoid two principal motivations for regarding perceptual experiences as essentially propositional, and thus intentional.

But there are other reasons why philosophers hold that perceptual experiences are intrinsically propositional, and thus intentional. In the following sections, I argue that perceptual experiences do not essentially have propositional representational contents,

and thus a propositional structure, because: (1) they do not essentially take facts or states of affairs in the external physical world as their objects; (2) their content does not require intensional expression utilizing that-clauses; (3) they do not essentially refer to, or involve directedness towards, their objects; (4) they do not essentially ascribe or predicate properties to their objects; (5) they are not essentially truth-evaluable; (6) they do not essentially mean or signify their objects; (7) they do not essentially involve either actual beliefs, judgments or takings to be the case or epistemic would-be judgment or belief looks; and (8) they have no necessary connection with propositionally-described behaviour. I will discuss each of these reasons in turn, beginning with facts.

### 8.3 Facts

By perceptual experiences being propositional in structure, most philosophers mean that they take facts as their objects, or have factual contents, and thus require expression utilizing that-clauses. Russell was an early twentieth-century advocate of the view that perception gives facts rather than particulars.<sup>22</sup> Like Armstrong and Pitcher, Runzo claims that "the seeing of things is reduceable to (actually consists in) the seeing of facts."<sup>23</sup> Perceptual experience is essentially propositional in structure because "to perceive an object or state of affairs, X, is, and is no more than, to be episodically aware of a set of *propositions* about X."<sup>24</sup> Pendlebury believes that perceptual representation is intrinsically propositional because "it primarily represents not things, kinds of things, or properties or qualities, but possible states of affairs."<sup>25</sup> The question whether perceptual experience invariably takes a propositional object amounts to the question whether perceptual experience is essentially a propositional attitude. As long as the objects of perceptual experience are held to be facts or propositions, rather than direct objects, perceptual experience will essentially be truth-evaluable and have conditions of satisfaction, and thus be intentional. Perceptual experience which takes only propositional objects will essentially have propositional contents requiring expression in intensional terms.

Since facts are not themselves physical objects, but are instead facts *about* physical objects, the seeing of physical objects cannot plausibly be reduced to the seeing of facts. Kneale rightly insists that "it is certainly not true that all respectable talk of perceiving can be reduced to talk of perceiving-that."<sup>26</sup> If Runzo is right that perceiving X is *nothing more than* being episodically aware of a set of propositions *about* X, then what distinguishes perceiving X from merely thinking about X or idly entertaining a set of propositions about X in X's absence? Surely what marks the distinction is that, in

perception, we are experientially aware of X itself, rather than simply a proposition *about* X. While perceptually experiencing *that* X is F takes facts *about* X and its F-ness as its object, perceptual experience *of* an X which is F takes X and its F-ness itself as its object. Perceptual experiences do not essentially *factually* represent, representing *that* such and such is the case.

#### 8.4 That-Clauses

Most philosophers agree that perceptual experiences may take either direct or propositional objects, and that perceptual verbs may take either nouns or propositional that-clauses as their grammatical objects.<sup>27</sup> A distinction is then drawn between direct object perceiving and factual or propositional perceiving. The question whether perceptual experience is essentially propositional in structure amounts to the question whether perceptual experience essentially takes propositional objects, or whether perceptual verbs essentially take propositional clauses. Since perceiving *that*, perceiving *as having* and perceiving *to be* are all propositional perceptual contexts which entail either actual or would-be taking *to be* the case, and thus actual or would-be beliefs,<sup>28</sup> they are essentially epistemic contexts. Because perceiving *as being* just is perceiving *as having*, the claim that all perceiving is perceiving *as being*, or that all perceptual representation is representation *as being*, amounts to the claim that all perceptual representation has an epistemic component. As a non-epistemic theorist, I deny that propositional perception, perception which takes a propositional object, is a necessary constituent of perceiving, and reject the notion that perceptual representation is essentially propositional perceptual representation. Perceptual experiences can possess objectual content without having to possess propositional content.

#### 8.5 Reference

The notion that perceptual experiences are essentially propositional, and thus intentional, is largely motivated by referential considerations. Brentano characterizes intentionality in terms of *reference to* a content or *direction toward* an object. Like Brentano, Searle believes that states are intentional if they make reference to something beyond themselves.<sup>29</sup> Kim even regards reference as "the basic intentional idiom that constitutes the intentionality of intentional relations."<sup>30</sup> Since I wish to defend a non-epistemic account of perception, and since, as Smith points out, "Reference in general is an intentional or broadly epistemic phenomenon,"<sup>31</sup> I deny that perceptual experiences are intrinsically, and thus essentially, referential. We can perceptually *apprehend*



external physical reality without having to *refer to* that reality. We need not, in Lloyd's phrase, "'focus on' or 'pick out'"<sup>32</sup> the objects of simple perceptual experience. By denying that perceptual experiences are essentially referential, I reject the notion that perceptual experiences are intrinsically intentional in Brentano's sense of intentionality. If perceptual experiences do not essentially refer to their objects, then they need not be intentional. By abandoning reference, I avoid a principal reason for regarding perceptual experience as essentially propositional in structure.

Whether perceptual experiences can be about or directed at their objects without thereby referring to them is a difficult question.<sup>33</sup> Since I suspect that any account of directedness or aboutness must ultimately appeal to reference, and thus intentionality, I deny that perceptual experiences are essentially about or directed at their objects. Reference to an external physical object is not a necessary condition of its looking some way to us. We need not be directed at an external physical object simply because it makes a difference to our perceptual experience such that we would notice its sudden absence. Since we can perceive an external physical object without perceptually attending to it, perceptual experiences need not involve referential attention. S need not differentiate or discriminate X from its background in order to perceive X, and so need not perceptually attend, and thus refer, to X. In order for S's perceptual experience to *have* an object, S must be *related to* the object. But it does not follow that S must be *directed at* the object. Perceptual experiences can *have* objects, can non-propositionally perceptually represent objects, without having to be *directed at* or *about* those objects. Perceptual experiences need only have non-referential of-ness. We can have perceptual experiences of external physical objects without *referring to* those objects.

The fact that perceptual experiences present or represent their objects to percipients does not entail that what is presented or represented is thereby referred to. Just as the selective sensitivity of retinal cones and rods to only certain frequencies of electromagnetic radiation does not entail directedness or reference to those frequencies of electromagnetic radiation, the selective responsiveness of the perceptual system to certain stimulus properties, such as the selective response of edge detectors in the visual cortex to edges of objects, need not involve aboutness, directedness or reference to those stimulus properties. For the direct realist, perceiving is not a mental state *about*, but rather a species of *direct contact with*, external physical objects. Perceptual experiences, unlike beliefs, judgments or takings to be the case, are not intrinsically referring. Since perceptual experiences do not essentially refer to items in the external physical world, they do not essentially represent things *as being* the case.

Putnam explains that reference, as "a paradigmatic intentional notion,"<sup>34</sup> is "not just a matter of 'causal connections'; it is a matter of *interpretation*."<sup>35</sup> Perceptual experiences need not be referential because early low-level perceptual processing is wholly free of any interpretation, and is thus non-epistemic. If reference is a matter of interpretation, and if non-epistemic theorists are correct in maintaining that perceptual experiences are not essentially interpretative, then perceptual experiences need not be referential. But if intentionality is a function of reference, and if perceptual experiences need not be referential, then perceptual experiences need not be intentional. Thus, if intentionality is a function of reference, and if reference is a matter of interpretation, then simple non-epistemic perceptual experiences, being wholly free of any interpretation, need not be intentional.

Many philosophers who have held that perceptual experiences are intrinsically intentional have pressed the language/experience analogy, insisting that experiences represent in the manner of linguistic entities. Mistakenly believing that "demonstrative, acquainting content" forms an essential part of the content of any perceptual experience,<sup>36</sup> and that "demonstrative reference is a linguistic reference to an object," Smith concludes that perception is "a mental reference, an intentional directedness, to an object directly before the perceiver."<sup>37</sup> He explicitly draws a parallel between linguistically referring to an object by *saying* "this" and demonstratively referring to an object by *seeing* "this." Unlike Smith, I believe that perception can be essentially indexical without having to be a demonstrative referring experience. From the fact that S's perceiving X *enables* S to refer to X, even *demonstratively* to refer to X, it does not follow that S's perceiving X essentially involves referring to X. We must not confuse reference *enabling* with reference *requiring*. While perceptual experience is essentially indexical, it need not be demonstrative in the sense of having a content which requires specification with demonstratives.

## 8.6 Predication

Philosophers often conclude that perceptual experiences are intrinsically propositional in structure because they believe that perceptual experiences essentially involve ascribing or predicating properties to their objects.<sup>38</sup> Any construction with the "is" of predication is a propositional construction since it specifies a complete state of affairs, something's *being* such and such. But the Fregean characteristics of propositions, namely, that they be abstract, truth-evaluable and formed according to rules, do not apply to the content

of simple perceptual experiences.<sup>39</sup> Fodor notes that possessing a truth-value requires abstractness and something analogous to the ascription of a property to an object.<sup>40</sup> But simple perceptual experiences are in no way abstract and do not essentially ascribe or predicate properties to their objects. In Dretske's jargon, perceptual experiences do not essentially play "the game of 'saying' how things stand elsewhere in the world."<sup>41</sup>

In maintaining that genuinely perceptual experiences do not essentially ascribe or predicate properties to their objects, I am not, of course, suggesting that genuinely perceptual experiences are merely adverbial, rather than transitive or act/object, in structure. I mean only that perceptual experiences do not essentially involve taking a stand on the way things are in the world. Perceptual experiences essentially present or represent the world in a certain way without having to present or represent the world as *being* a certain way, or as *having* certain properties.

### 8.7 Truth-Evaluability

The mistaken notion that perceptual experiences are essentially truth-evaluable, or intrinsically have correctness conditions, encourages the view that perceptual experiences are essentially propositional, and thus intentional, for only what is propositional in structure can be either true or false.<sup>42</sup> There are various reasons why philosophers believe that perceptual experiences are essentially truth-evaluable. First, they believe that perceptual experiences often mislead or misrepresent, giving rise to false beliefs or judgments, and that perceptual experiences can only give rise to false beliefs or judgments if they themselves have a structure subject to either truth or falsity. The capacity to misrepresent their objects is frequently cited as a defining characteristic of intentional attitudes. Secondly, philosophers believe that perceptual experiences essentially consist of, carry or convey information about the environment, information *that* such and such is the case in the percipient's surroundings, and that such propositional information itself is essentially truth-evaluable. Thirdly, philosophers believe that the *purpose* or *function* of perception is to enable the percipient to navigate her environment successfully. The acquisition of knowledge *how* to navigate one's environment successfully, as opposed to the acquisition of knowledge *that*, does not straightforwardly involve the acquisition of a state with truth-evaluable content. But the acquisition of knowledge *how* to navigate the environment which, in fact, leads to unsuccessful navigation is regarded as the acquisition of a capacity to behave falsely towards the environment, to behave *as though* certain things were the case in the environment when they are not the case. The acquisition of unsuccessful behavioural

capacities by means of the senses is thus held to be the acquisition of mental states with truth-evaluable content.

Searle argues that perceptual experiences are intrinsically intentional because internal to every perceptual experience is an intentional content which determines conditions of satisfaction for the experience, conditions under which the experience is satisfied or veridical.<sup>43</sup> He insists that perceptual experiences essentially have conditions of satisfaction and are directed at or of objects and states of affairs in the world in precisely the same way as intentional beliefs and desires.<sup>44</sup> Knowing what must be the case in the world in order for an experience to be genuinely perceptual rather than merely hallucinatory is simply the intentional content of perceptual experience determining its conditions of satisfaction. Searle claims that perceptual content does not simply make reference to things, but also refers to things *as such* and *such*, requiring the existence of a whole state of affairs in the world in order to be satisfied. Believing that perceptual experiences always take facts as their objects, he concludes that perceptual content is always propositional in structure. Perceptual experiences essentially have propositional intentional contents because perceptual content internally determines conditions of satisfaction and conditions of satisfaction are always *that such and such* is the case.

But since perceptual experiences do not essentially refer to their objects, they do not essentially refer to their objects *as being* or *as having* such and such properties. Since perceptual experiences do not essentially refer or predicate properties, they do not essentially have conditions under which they refer or predicate truly or falsely, and so do not essentially have propositional intentional contents which specify conditions under which the experiences are satisfied, successful or veridical. If there is no essential reference or predication, no essential representation *as being* or *as having*, then there are no intrinsically specified, and thus essential, conditions of successful reference or predication, and so no essential satisfaction or veridicality conditions. If perceptual experiences do not essentially refer or predicate properties to their objects, and thus do not essentially have conditions of satisfaction, then the content of perceptual experience need not be "equivalent to a whole proposition,"<sup>45</sup> requiring expression utilizing that-clauses. Unlike Searle, I believe that the content of perceptual experience *can* be made explicit, or be adequately described, utilizing only noun phrases. Simple perceptual experiences have perceptual content which does not require characterization utilizing that-clauses.

Because simple perceptual experiences have only conditions of *occurrence*, and not conditions of *satisfaction*, they need not have propositional intentional content. The content of perceptual experience does not specify or require the existence of a whole state of affairs if it does not essentially represent a whole state of affairs, representing things *as being* the case. I do not deny that perceptual experiences can have intentional propositional content or propositionally representational properties. I deny only that perceptual experiences intrinsically, and thus essentially, have intentional propositional content. Since perceptual experiences are not essentially propositional in structure, since they do not essentially refer or predicate properties to their objects, they are not intrinsically intentional.

Searle believes both that perceptual experiences are intrinsically intentional and that intentionality is a matter of truth and falsity, success and failure and conditions of satisfaction.<sup>46</sup> He thus holds that perceptual experiences are intrinsically truth-evaluable. But other than being inefficient or ineffective transducers of the external physical world, in what sense are simple perceptual experiences subject to falsity or failure? Does a simple visual experience which provides only blurry access to its objects fail in any respect if it does not represent its objects *as being* clear or distinct? Kneale observes that "simple seeing is certainly not believing, nor yet coming to believe, since it is just not the sort of thing that could conceivably be mistaken--or right either."<sup>47</sup> Only if there is some element of taking *to be* the case can there be any mis-taking. Perceptual experience *as of* an X which is F, as an instance of experiencing *as being*, can be mistaken or in error, but not simple perceptual experiences *of* an X which is F. Correctness and incorrectness or veridicality and falsidicality apply only to representation *as being* the case, and simple perceptual experiences do not represent things *as being* the case in the external physical world. If an X which is F looks G, but does not look *to have* or *to be* G, if there is neither actual nor would-be judging or believing, then the perceptual experience can be neither true nor false. Perceptual experiences do not essentially have conditions of satisfaction if they do not essentially predicate or ascribe properties to their objects.

There is a species of perceptual content with no scope for error, not because it is infallible, but because it is not the sort of thing to which the terms "error" or "fallible" properly apply. There is a sense in which simple perceptual experiences cannot get things wrong, not because they are invariably right, but rather because they are not the sort of thing which can be right or wrong in the first place. A perceptual experience which does not predicate or ascribe properties cannot get the predication or ascription of



properties right or wrong. Correctness or veridicality simply do not apply to perceptual experiences which make no commitments or assertions about the properties of objects in the external physical world. Perceptual experiences are only true or false if they have a semantic propositional structure, referring by truly or falsely predicating properties to things. If perceptual experiences are not intrinsically referential and predicative, then they are not essentially truth-evaluable with conditions of satisfaction, and thus need not have a propositional structure.

There can be no conditions of satisfaction in the absence of predication. Simple perceptual experiences do not intrinsically represent *that*, represent *as being*, represent *as having* or represent *to be*, and thus need not have conditions of satisfaction. Truth, success and conditions of satisfaction concern interpretation, and simple perceptual experiences are wholly free of any interpretation. Ebersole explains that "Right and wrong, success and failure, what I know or find out--all these things apply to the interpretative element involved in seeing."<sup>48</sup> Since early, low-level perceptual processing is wholly free of interpretation, perceiving is not essentially interpretative, and thus need not be either propositional in structure or subject to rightness, correctness or success conditions. Because truth and falsity are fundamentally epistemic notions, non-epistemic theorists deny that perceptual experiences are intrinsically truth-evaluable, and thus essentially either true or false, veridical or falsidical, correct or incorrect, successful or unsuccessful or satisfied or unsatisfied. The fact that we *intend* our perceptual experiences to represent how the external physical world really is, even the fact that it is the *purpose* or *function* of having perceptual experiences to enable us to represent how the external physical world really is, does not entail that perceptual experiences themselves essentially have correctness or satisfaction conditions.

Vesey believes that the would-be judging, believing or taking to be the case involved in seeing *as* renders perceptions, like judgments, either true or false. Seeing is essentially truth-evaluable because all seeing is seeing *as*, seeing *as* is what, on looking at something, a person would judge, believe or take it to be in the absence of evidence to the contrary, and judgments, beliefs and takings to be the case are all essentially truth-evaluable. Although seeing need not involve any *actual* judgments, beliefs or takings to be the case, all seeing is seeing *as* and seeing *as* involves at least truth-evaluable would-be judgments, beliefs or takings to be the case. Seeing is thus essentially truth-evaluable because all looking to a percipient involves truth-evaluable epistemic looks of objects. The solution is to recognize an additional species of looking to a percipient, one which is not epistemic and thus does not require a truth-evaluable

structure. By denying that objects which are seen essentially have an epistemic look to a percipient, we remove a principal reason for regarding perception as essentially truth-evaluable, and thus propositional.

## 8.8 Meaning

The notion that perceptual experiences are essentially propositional in structure is often motivated by the view that they are intrinsically semantic. Like many contemporary philosophers of perception, McGinn believes that perceptual experiences, unlike bodily sensations, *semantically* represent their environmental causes because they essentially involve the world seeming to the percipient *to be* a certain way.<sup>49</sup> The semanticity of perceptual experience is held to be a function of its representing things *as being* or *to be* the case. But since perceptual experiences can represent their objects *in* certain ways without having to represent their objects *either as being* certain ways or *to be* certain ways, they need not refer to their objects by predicating properties to them truly or falsely. If the sense or meaning of a representation is its "comment" on the referent of the representation, and if perceptual experiences do not essentially comment on their objects, then perceptual experiences need not have a sense or meaning, and thus need not be semantic.

Semantic properties like reference and truth-evaluability have no obvious application to simple, non-epistemic perceptual experiences, where there is no predication. If perceptual experiences do not essentially assert anything about their objects, if they do not intrinsically predicate properties to their objects, then they need not have the semantic property of possessing conditions of satisfaction. Perceptual experiences can have non-semantic, non-intentional representational content, content which is neither truth-evaluable nor referential. Perceptual experiences can be identified or individuated in terms of non-propositional representational content without having to be identified or individuated in terms of semantic content.

## 8.9 Epistemic

Another motivation for the view that perceptual experiences are intrinsically propositional, and thus intentional, is the notion that perceptual experiences must be truth-evaluable if they are to justify, ground or serve as the basis for perceptual beliefs or judgments. Philosophers reason that a perceptual experience cannot ground a perceptual belief or judgment *that X is F* unless the experience itself represents *that X is*

F, and thus has the propositional representational content *that* X is F. Perception cannot inform us about the external physical world, cannot be a reason for perceptually believing or judging, unless it has a structure amenable to beliefs or judgments, representing things as *being* the case.

The link between *epistemic* perceiving, *propositional* perceiving and perceiving as *being* the case is made explicit by Vesey. He argues that "Perception would not be how we find things out about the world if there were not epistemic appearances."<sup>50</sup> By "epistemic appearances," Vesey means both "seeing something as a thing of a certain kind"<sup>51</sup> and seeing "things as being things of a certain sort."<sup>52</sup> He insists that epistemic appearances, and thus both seeing *as* and seeing *as being*, share with beliefs and propositions the property of being true or false of the external physical world.<sup>53</sup> Since only what is itself propositional in structure can be either true or false, Vesey's view that all perceiving is perceiving *as* amounts to the view that all perceiving is perceiving *as being* such and such, and is thus propositional in structure. The assumption is that, because perceptual beliefs and judgments are propositional in structure, only what is itself propositional in structure can ground or justify perceptual beliefs and judgments.

Vesey's question is: How can non-propositional content ground or justify propositional content? While an interesting epistemological question in its own right, one which lies beyond the scope of this dissertation and belongs instead to a dissertation on the epistemology of perception, it is important to recognize that Vesey dissolves rather than solves the problem by injecting propositional content into perceptual experience itself. He reasons that only what is itself propositional in structure can ground the propositional. Since perceptual beliefs and judgments are propositional in structure, perceptual experience must itself be propositional in structure if it is to ground our perceptual beliefs and judgments. Perceptual experiences can only ground perceptual inferences if they have the structure required by inferences, namely, a propositional structure. Rather than attempting to bridge the gap between non-propositional and propositional phenomena, Vesey simply insists that perceptual experiences have an intrinsic propositional structure, concluding that all perceiving is perceiving *as*. If perceptual experiences intrinsically have intentional content, and if intentional content essentially involves epistemic looks, then all perceiving is perceiving *as*, and is hence cognitive. Since intentional content essentially involves epistemic would-be judgment or belief looks, non-epistemic theorists deny that perceptual experiences are intrinsically, and thus essentially, intentional.

## 8.10 Information

The currently fashionable notion that perceptual experiences are informational structures which literally contain, encode, or consist of, information encourages the view that perceptual experiences are essentially propositional in structure since information is both truth-evaluable and refers to whatever it carries information about, and truth-evaluability and reference are core elements in propositional content. Non-epistemic accounts of perception are threatened by the view that perceptual experiences are informational structures if perceptual experiences literally consist of information, and if information essentially has a propositional or factual structure, essentially representing *that* such and such is the case in the external physical world.

Since Dretske maintains that intentionality "is a pervasive feature of *all* reality--mental and physical,"<sup>54</sup> and that purely mechanical devices like thermostats have internal states with the same sort of content as living organisms when they perceive *that* such and such is the case,<sup>55</sup> it is difficult to see how percipients could possibly fail to have intentional propositional content, failing to perceive *that* such and such is the case. For if thermostats have internal states with intentional propositional content simply in virtue of their states being lawfully dependent upon the environment, then perceptual experiences will have intentional propositional content simply in virtue of their lawful dependence upon the percipient's environment. As a direct realist, Dretske is committed to the view that experiential content depends lawfully upon items in the physical environment. But if lawful dependence on "an external magnitude" is sufficient for having states with an intentional propositional content, then experiential content is essentially propositional in form, and there is no room remaining for a wholly non-epistemic, non-propositional account of perceptual experience.

As a non-epistemic theorist, Dretske believes that perceptual experiences can literally consist of propositional information without having to be cognitive or epistemic. But how can our perceptual experience represent X as F if we do not possess the concept of F and apply it to X? Surely the application of our concept of F to X when we experientially represent X as F qualifies as a cognitive activity. Perceptual experiences will be cognitive if they literally consist of information *that* such and such is the case in the external physical world, and if experientially representing *that* X is F essentially involves at least an implicit application of the concept of F to X. Dretske himself speaks of "the epistemic character of the concept of information."<sup>56</sup> If perceptual experiences

intrinsically carry information, and if information is essentially epistemic in character, then perceptual experiences will essentially have an epistemic character.

Dretske speaks of "the propositional character of information" and refers to perception as "an information delivery system."<sup>57</sup> The problem is that, if perceptual experiences literally consist of information, and if information has a propositional character, then perceptual experiences will themselves have a propositional character. One solution to the problem would be to argue that the informational content of perceptual experience need not be content *that* such and such is the case since not all informational content is *factive* or *factual* content. The information contained in perceptual experiences could simply be *practical* content, informational content which *enables us to behave* in a certain way without thereby giving us *theoretical* or *factual* knowledge. Perceptual experiences could literally consist of information without having to be propositional in character because the information would be practical, rather than theoretical or factual, and thus not propositional in structure.

But this solution to the problem would be unsatisfactory for at least two reasons. First, informational content which enables us to do something is information which facilitates behaviour, and there is good reason to believe that behaviour must itself be explained in intentional propositional terms. If the only plausible account of behaviour is in terms of propositional belief/desire psychology, then practical informational content which enables us to behave in a certain way will not be wholly free of propositional content. Secondly, physicalist attempts to defuse Jackson's knowledge argument against physicalism have been largely unsuccessful in demonstrating that the difference in knowledge which everyone agrees would result when the brilliant neurophysicist Mary first leaves her black and white room can be accounted for solely in terms of the acquisition of *practical*, rather than *propositional*, knowledge.<sup>58</sup> Physicalists have simply not been persuasive in arguing that Mary would acquire only practical knowledge, the capacity to know old facts in a new way, rather than altogether new facts about perceiving.

Like White, Robinson and Collins, Borst rejects the applicability of intentionality to perception, denying that perceptual verbs are intentional verbs.<sup>59</sup> But if one holds with Borst that perception is essentially a matter of acquiring *information* about one's immediate environment, and not just a matter of having perceptual experiences of that environment, and if information is both truth-evaluable and referential, truly or falsely referring to that about which it is information, then it is simply not as clear as Borst



suggests that perceptual verbs are not intentional verbs. It may well be true that the "gaining of information about an independent reality contrasts sharply with the fundamental idea of intentionality, namely, that of phenomena which 'contain objects within themselves'."<sup>60</sup> But the gaining of information which essentially refers to an independent reality, and is thus truth-evaluable with respect to that reality, also has a great deal in common with intentionality. Burge actually links the intentionality of certain perceptual representations to the information which they carry or what they mean.<sup>61</sup>

The question whether perceptual experiences must themselves be propositional in structure if they literally consist of propositional information is admittedly a complicated matter. However, the fact that interactions between simple perceptual experiences and higher-level cognitive processing result in the acquisition of perceptual beliefs and judgments does not entail that we extract propositional information from perceptual experiences which are *intrinsically propositional in structure*, any more than the fact that interactions between simple perceptual experiences and higher-level cognitive processing result in the acquisition of perceptual beliefs and judgments entails that we extract perceptual beliefs or judgments from perceptual experiences which are *literally composed of beliefs or judgments*. Facilitating the acquisition of information is not to be confused with information itself. Being informative is not the same as being information. Perceptual experiences need not literally consist of information *about* the external physical world simply because their occurrence is *nominally dependent upon* the external physical world. I maintain that perceptual experiences do not have intrinsic, propositional representational content, and that any representing or presenting *as being* is extrinsic to the experiences themselves, resulting from an interaction between the perceptual experiences and higher-level cognitive structures.

### 8.11 Behaviour

The notion that perceptual experience is intrinsically propositional in structure is often motivated by behavioural considerations. Philosophers reason that, if the purpose or function of having perceptual experiences is to facilitate successful behaviour in one's environment, and if behaviour is explicable only in terms of an intentional propositional belief/desire psychology, then the purpose or function of perceptual experiences representing the environment will actually be to facilitate intentionally described behaviour. The intentionality of perceptually-facilitated behaviour would then require intentional representations, perceptual experiences which not simply represent the

environment, but also represent the environment *as being* a certain way. If behaviour essentially has intentional properties, and if the purpose or function of having perceptual experience is to facilitate behaviour, then perceptual experiences will themselves require intentional properties. The notion that propositionally-described behaviour requires propositional perceiving is implicit in Vesey's talk of perception being, not simply a reason for believing, but also a guide for behaviour.<sup>62</sup> But as in the case of epistemic looks or appearances of objects, philosophers simply dissolve, rather than solve, the problem of how non-intentional and non-propositional perceptual experiences can possibly ground intentionally- and propositionally-described behaviour by stipulating that perceptual experiences essentially represent things *as being* the case, and thus have intrinsic intentional propositional content.

If Pylyshyn is right that a propositional code or format of perceptual representation is required in order to explain how we can describe pictures in words, then our inability to describe impossible figures suggests that a propositional code or format is inappropriate at least for perceptual experiences of impossible figures. What is incapable of description is not plausibly propositional in structure. Consider Hinton's descriptions of "a thing that looks a bit like a tuning fork and has got three prong-ends projecting from a base from which only two prongs depart" and "a static staircase you could go on climbing for ever."<sup>63</sup> If you had not already known what Hinton was referring to, you probably would not have understood what he meant by these descriptions. Yet, if perceptual representational content is essentially propositional in structure, then it should be relatively straightforward to provide a propositional characterization of the content of our perceptual experiences of impossible figures. Since it is notoriously difficult to provide propositional characterizations of visual figures like the impossible prongs, impossible triangle, and Penrose staircase, it is implausible to suppose that perceptual experiences essentially involve propositional contents. We can easily see impossible figures, even see what is wrong with them, without ever being able to describe what is wrong with the figures. This fact surely counts against the view that perception is essentially propositional in structure. There are at least some perceptual phenomena for which a propositional account of perceiving is implausible.

## 8.12 Subjectivity

In denying that perceptual experiences are intrinsically intentional, I deny that intentional representational properties are intrinsic, and thus essential, to perceptual experiences. I reject the notion that propositional representational content is intrinsic to

perceptual experiences and contributes to make perceptual experiences the experiences they happen to be. Perceptual experiences which differ with respect to propositional representational content need not differ *qua* experiences, and thus need not be type-distinct perceptual experiences.

But most contemporary philosophers of perception will be reluctant to abandon the idea that perceptual experiences are intrinsically intentional because they follow Brentano in regarding intentionality as the distinguishing mark of the mental. However, I believe that it is subjectivity, not intentionality, which distinguishes mental phenomena from non-mental phenomena and is an essential part of perceptual experience. Russell observes that "Perception is not impartial, but proceeds from a center; our perceptual world is (so to speak) a perspective view of the common world."<sup>64</sup> Since having a view of, or a perspective on, the world does not entail referring to, or being directed at, the world, the subjectivity of perceptual experience does not entail intentionality.

Mellor speaks disparagingly of "the cult of subjectivity," insisting that there are "no subjective facts about anything,"<sup>65</sup> no perspectival facts which cannot be accommodated by an objective science. But his rejection of subjective perspectival facts is difficult to reconcile with our immediate experience, not simply of the way that it is like to have perceptual experiences, but also of the way that it is like to have a field of perceptual attention set against a background of mere perceptual awareness. Arguing against neutral monists, but applying equally to physicalists, Russell insists that "In a world where there were no specifically mental facts, is it not plain that there would be a complete impartiality, an evenly diffused light, not the central illumination fading away into outer darkness, which is characteristic of objects in relation to a mind?"<sup>66</sup> Elsewhere, Russell notes that "The public world of physics has no...centre of illumination."<sup>67</sup> In denying that there are subjective perspectival facts, Mellor is implausibly denying that there is such a centre of experiential illumination in perception. There is, as Searle notes, "an ineliminable perspectival element in vision and in perception generally."<sup>68</sup>

Regarding consciousness as the fundamental mental notion, Searle maintains that subjectivity and intentionality are dependent upon consciousness.<sup>69</sup> Reminiscent of Russell, he rightly observes that "The world itself has no point of view, but my access to the world through my conscious states is always perspectival, always from my point of view."<sup>70</sup> Unlike Searle, I prefer not to make subjectivity dependent upon, or a function of, consciousness because I believe that a wholly unconscious creature might still have a

perspective on the world, and thus enjoy mental states or attitudes characterized by subjectivity. Consciousness entails, but is not entailed by, subjectivity, and neither consciousness nor subjectivity entail intentionality.

- 1 Tyler Burge, "Individualism and the Mental," in *Studies in Metaphysics, Midwest Studies in Philosophy*, volume 4, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1979, p. 106.
- 2 G.E.M. Anscombe, "The Intentionality of Sensation: A Grammatical Feature," in *Analytical Philosophy*, second series, R.J. Butler (ed.), Oxford: Basil Blackwell & Mott Ltd., 1965, p. 161.
- 3 Alan R. White, "Seeing What is Not There," *Proceedings of the Aristotelian Society* 70 (1969-70), p. 63.
- 4 D.M. Taylor, "On What is Seen II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 15.
- 5 Fred I. Dretske, *Seeing and Knowing*, Chicago: The University of Chicago Press, 1969, pp. 43-4.
- 6 D.M. Armstrong, "Immediate Perception," in *The Nature of Mind and Other Essays*, Ithaca: Cornell University Press, 1981, p. 128.
- 7 Dretske, *Seeing and Knowing*, p. 55.
- 8 G.J. Warnock, "On What is Seen I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, p. 10.
- 9 See Howard Robinson, "The Irrelevance of Intentionality to Perception," *Philosophical Quarterly* 24 (1974), pp. 300-15 and Arthur W. Collins, "The Epistemological Status of the Concept of Perception," *Philosophical Review* 76 (1968), pp. 436-59.
- 10 Robinson, "The Irrelevance of Intentionality to Perception," p. 301.
- 11 See John R. Searle, *Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987, p. 40, Colin McGinn, *The Character of Mind*, Oxford: Oxford University Press, 1982, p. 8, Christopher Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, Oxford: Oxford University Press, 1983, p. 5, Gilbert Harman, "The Intrinsic Quality of Experience," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990, p. 34, and Martin Davies, "Perceptual Content and Local Supervenience," *Proceedings of the Aristotelian Society* 92 (1992), p. 40.
- 12 Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, p. 5.
- 13 See G.N.A. Vesey, "Seeing and Seeing As," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Doubleday & Company, Inc., 1965, p. 83, and Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, pp. 5-6.



- 14 See Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, p. 12, for the link between experientially representing as being and would-be judgments.
- 15 Vesey, "Seeing and Seeing As," p. 83. See G.N.A. Vesey, *Perception*, Garden City: Doubleday & Company, Inc., 1971, p. 15, for the connection between perceiving as being and epistemic would-be judgment or belief looks of objects to percipients.
- 16 Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, p. 7.
- 17 See John Heil, *The Nature of True Minds*, Cambridge: Cambridge University Press, 1992, p. 3, Sydney Shoemaker, "Qualia and Consciousness," *Mind* 100 (1991), p. 515, and Tim Crane, "Introduction," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992, p. 6.
- 18 See Yuval Lurie, "Inner States," *Mind* 88 (1979), p. 248, and E.J. Lowe, "Experience and Its Objects," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992, p. 89.
- 19 Colin McGinn, *Mental Content*, Oxford: Basil Blackwell Ltd., 1991, p. 58.
- 20 Searle, *Intentionality: An Essay in the Philosophy of Mind*, p. 46.
- 21 Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, p. 9.
- 22 Bertrand Russell, *Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984, p. 37.
- 23 Joseph Runzo, "The Radical Conceptualization of Perceptual Experience," *American Philosophical Quarterly* 19 (1982), p. 210.
- 24 Joseph Runzo, "The Propositional Structure of Perception," *American Philosophical Quarterly* 14 (1977), p. 214.
- 25 Michael Pendlebury, "Perceptual Representation," *PAS* 87 (1986-87), p. 93.
- 26 William Kneale, "An Analysis of Perceiving in Terms of the Causation of Beliefs II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971, pp. 72-3.
- 27 See G.J. Warnock, "Postscript, 1963," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 66, and Roderick M. Chisholm, *Perceiving: A Philosophical Study*, Ithaca: Cornell University Press, 1957, p. 142.
- 28 See Chisholm, *Perceiving: A Philosophical Study*, pp. 3, 142.
- 29 John R. Searle, *The Rediscovery of the Mind*, Cambridge: The M.I.T. Press, 1992, p. 84.
- 30 Jaegwon Kim, "Perception and Reference Without Causality," *Journal of Philosophy* 74 (1977), p. 609.

- 31 David Woodruff Smith, "Content and Context of Perception," *Synthese* 61 (1984), p. 62.
- 32 Dan Lloyd, "Mental Representation from the Bottom Up," *Synthese* 70 (1987), p. 34.
- 33 See Colin McGinn, "The Structure of Content," in *Thought and Object: Essays on Intentionality*, Andrew Woodfield (ed.), Oxford: Clarendon Press, 1982, p. 227, for an attempt to distinguish referential from non-referential species of aboutness.
- 34 Hilary Putnam, *Representation and Reality*, Cambridge: The M.I.T. Press, 1988, p. 70.
- 35 *Ibid.*, p. 118.
- 36 David Woodruff Smith, "The Realism in Perception," *Noûs* 16 (1982), p. 45.
- 37 Smith, "Content and Context of Perception," p. 62.
- 38 See D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, p. 127, for the connection between predication and existential propositional structure.
- 39 See Alan H. Goldman, *Empirical Knowledge*, Berkeley: University of California Press, 1991, p. 89, for the link between perceiving as *having* F and epistemic perceiving.
- 40 Jerry A. Fodor, "Imagistic Representation," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981, p. 137.
- 41 Fred I. Dretske, *Explaining Behavior: Reasons in a World of Causes*, Massachusetts: M.I.T. Press, 1992, 65.
- 42 Alvin I. Goldman, "Perceptual Objects," *Synthese* 35 (1977), p. 276.
- 43 Searle, *Intentionality: An Essay in the Philosophy of Mind*, pp. 40, 48.
- 44 *Ibid.*, p. 39.
- 45 *Ibid.*, p. 40.
- 46 Searle, *The Rediscovery of the Mind*, p. 238.
- 47 Kneale, "An Analysis of Perceiving in Terms of the Causation of Beliefs II," p. 80.
- 48 Frank B. Ebersole, *Things We Know*, Eugene: University of Oregon Books, 1967, p. 75.
- 49 McGinn, *Mental Content*, pp. 44, 58.

- 50 Vesey, *Perception*, p. 15.
- 51 *Ibid.*, p. 18.
- 52 *Ibid.*, pp. 15, 74.
- 53 *Ibid.*, p. 14.
- 54 Fred I. Dretske, "The Intentionality of Cognitive States," in *Studies in Epistemology, Midwest Studies in Philosophy*, volume 5, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1980, p. 285.
- 55 *Ibid.*, p. 288.
- 56 Dretske, *Explaining Behavior: Reasons in a World of Causes*, p. 11.
- 57 Fred I. Dretske, "Author's Response: Why Information?" *The Behavioral and Brain Sciences* 6 (1983), p. 87.
- 58 See Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly* 32 (1982), pp. 127-36, and "What Mary Didn't Know," *Journal of Philosophy* 83 (1986), pp. 291-5, for the anti-physicalist knowledge argument, and see Laurence Nemirow, "Physicalism and the Cognitive Role of Acquaintance," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 490-99 and David Lewis, "What Experience Teaches," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 499-519, for the physicalist response.
- 59 C.V. Borst, "Perception and Intentionality," *Mind* 79 (1970), pp. 115-21.
- 60 *Ibid.*, p. 115.
- 61 Tyler Burge, "Cartesian Error and the Objectivity of Perception," in *Subject, Thought, and Context*, John McDowell and Philip Pettit (eds.), Oxford: Oxford University Press, 1986, p. 128.
- 62 G.N.A. Vesey, "Chairman's Remarks," commenting on Richard L. Gregory's "Perceptions as Hypotheses" and G.E.M. Anscombe's "Comment on Professor R.L. Gregory's Paper," in *Philosophy of Psychology*, S.C. Brown (ed.), London: The Macmillan Press Ltd., 1974, p. 227.
- 63 J.M. Hinton, *Experiences: An Inquiry Into Some Ambiguities*, Oxford: Oxford University Press, 1973, p. 115.
- 64 Bertrand Russell, *Human Knowledge: Its Scope and Limits*, New York: Simon and Schuster, Inc., 1964, p. 92.
- 65 D.H. Mellor, "Nothing Like Experience," *Proceedings of the Aristotelian Society*, new series 93 (1993), p. 2.
- 66 Russell, *Theory of Knowledge: The 1913 Manuscript*, p. 40.

- 67 Russell, *Human Knowledge: Its Scope and Limits*, p. 107.
- 68 Searle, *Intentionality: An Essay in the Philosophy of Mind*, p. 70.
- 69 Searle, *The Rediscovery of the Mind*, p. 227.
- 70 *Ibid.*, p. 95.

## Chapter 9

### The Qualia of Perceptual Experience

#### 9.1 Sensational Versus Representational Properties

In the previous chapter, I argued that perceptual experiences are not intrinsically intentional. In this chapter, I argue that perceptual experiences are identified and individuated, not in terms of intentional properties, but rather in terms of their phenomenal or qualitative properties, or qualia. Qualia are properties of perceptual experiences in virtue of which they have their phenomenal or qualitative character, the way that it is like for the percipient to perceive external physical objects. Like Shoemaker, I believe that we must distinguish the phenomenal or qualitative character of perceptual experiences, what it is like to have them, from their intentional content.<sup>1</sup>

Peacocke draws a important distinction between sensational and representational properties of perceptual experience.<sup>2</sup> The representational properties of a perceptual experience concern the way that the experience represents things as *being*. The representational content of a perceptual experience "is given by what someone would judge, taking that experience at face value,"<sup>3</sup> what they would judge as *being* the case in the absence of countervailing beliefs. The sensational properties of an experience are "properties an experience has in virtue of some aspect--other than its representational content--of what it is like to have that experience."<sup>4</sup>

Peacocke articulates his distinction between sensational and representational properties of perceptual experience by appealing to various constancy phenomena. Due to the effects of size constancy, our visual experience can represent trees as *being* the same size even though the nearer tree takes up more of our visual field. Although the nearer tree in some sense looks bigger, it does not look *to be* bigger, it is not represented as *being* bigger. Similarly, our auditory experience of two cars at different distances from us can represent their engines as running equally loudly even though "it seems undeniable that in some sense the nearer car sounds louder."<sup>5</sup> Peacocke's intrinsic sensational properties of perceptual experience can, when attended to from the "artist's perspective," become direct objects of awareness. By adopting the artist's perspective, we can become directly aware of the nearer tree's taking up a larger portion



of our visual field than the more distant tree. Closing one eye often helps to achieve this perspective.

Following Peacocke, contemporary philosophers of perception generally recognize two sorts of intrinsic property of perceptual experience: sensational properties and intentional, propositional representational properties. Peacocke's sensational properties of perceptual experience, as intrinsic, non-propositional and non-intentional properties of perceptual experience to which we can attend by suitably redirecting our attention, are examples of qualia of perceptual experience.

Perceptual experiences essentially have intrinsic phenomenal or qualitative properties, or qualia, a way that it is like perceptually to experience items in the external physical world, which is not reducible to propositional representational content. My denial that perceptual experiences are intrinsically intentional leads naturally to qualia realism. What is missing from functionalist belief-based analyses of perceiving, like those offered by Armstrong and Pitcher, is a plausible account of the distinctive phenomenology of perceiving, the way that it is like *for a percipient* to perceive items in the external physical world. Since subjectivity itself cannot be analysed functionally, the qualitative or phenomenal character of perceptual experience cannot be analysed functionally because any account of what it is like to have a perceptual experience must be in terms of what it is like *for a subject or percipient* to have the perceptual experience.

## 9.2 Qualia Scepticism

Many contemporary philosophers of perception are qualia sceptics, insisting that perceptual experiences have only intentional characteristics or properties, and denying that perceptual experiences have intrinsic sensational properties. McGinn, for instance, insists that "perceptual experience has none but representational properties (at least so far as consciousness is concerned)."<sup>6</sup> He also speaks of "Peacocke's 'sensational' properties of experience...assuming them to exist."<sup>7</sup> McGinn's statements are surprising since he pioneered the currently fashionable distinction between sensational and representational properties of perceptual experience, maintaining in his earlier work that seeing *that* it is sunny is a mental state which has "both sensational and propositional aspects," with propositional attitudes being "superimposed upon a prior basis of sensation."<sup>8</sup>

Qualia sceptics adopt what Shoemaker terms the "intentionalist view," the view that perceptual experiences "have no introspectable properties other than intentional ones,"<sup>9</sup> and thus deny that perceptual experiences have phenomenal or qualitative properties, or qualia. Tye insists that there are no "intrinsic, nonintentional features of which the subjects of the experiences can be aware and by virtue of which the experiences have their contents."<sup>10</sup> He claims that qualia can be reduced to aspects of the propositional representational content of perceptual experiences.<sup>11</sup> Qualia sceptics must implausibly regard phenomenal reduction, or assuming the artist's perspective, as propositional or intentional reduction.

Although Moore is often cited as an early proponent of the view that perceptual experiences are wholly transparent or diaphanous, and without any qualia, Russell's rejection of "mental modifications called 'contents'" on the grounds of "the difficulty of discovering them introspectively"<sup>12</sup> qualifies as an early expression of the view that perceptual experience reveals only its objects and their properties. More recently, and with considerable influence on contemporary qualia sceptics, Farrell argues that experiences are featureless.<sup>13</sup> Agreeing with Farrell, Armstrong insists that perceptual experience itself "is featureless, transparent, qualityless."<sup>14</sup> He believes that "the only qualities involved in perception are those involved in the intentional content of the perception. These qualities are qualities of *external objects*."<sup>15</sup> Armstrong claims that Searle's commitment to "the existence of *internal* phenomenal qualities" leads him "into what I think is an unfortunate falling away from his declared Direct Realism."<sup>16</sup> Armstrong implies that the admission of phenomenal qualities of perceptual experiences is suggestive of representationalism, and explicitly accuses Searle of maintaining "a sophisticated version of the Representative theory of perception."<sup>17</sup>

But since the admission of phenomenal or qualitative properties of perceptual experience does not entail either the admission of inner non-physical existents or the acceptance of the notion that we are only directly aware of the phenomenal or qualitative properties of perceptual experience, the admission of qualia of perceptual experience is neither inconsistent with direct realism's notion of a direct contact with external physical objects nor suggestive of representationalism. Against Armstrong, it is clear that at least some of the phenomenal qualities which feature in perceptual experiences are not qualities of external physical objects, but are instead qualia of perceptual experience.

Dennett, Harman and Levin all vigorously deny the existence of phenomenal or qualitative properties of perceptual experience.<sup>18</sup> Harman rejects the distinction between qualitative and intentional content, insisting that perceptual experience has only intentional content and properties. He claims that we are only aware of the intentional or relational features of our perceptual experiences, and never aware of their intrinsic nonintentional features.<sup>19</sup> Insisting that the only properties of perceptual experience to which we have conscious access are intentional properties, Harman challenges us to "Look at a tree and try to turn your attention to intrinsic features of your visual experience....the only features there to turn your attention to will be features of the presented tree, including relational features of the tree 'from here.'"<sup>20</sup> In a similar vein, Valberg claims that, "if we are open to our experience, all we find is the world."<sup>21</sup> The view that perceptual experience is wholly transparent is nicely expressed by McGinn when he writes: "Consider your consciousness of some items--an external object, your own body, a sensation--and try to focus attention on that relation: as many philosophers have observed, this relation of consciousness to its objects is peculiarly impalpable and diaphanous--all you come across in introspection are the objects of consciousness, not consciousness itself."<sup>22</sup>

But our consciousness of external physical objects is not nearly as transparent or diaphanous as qualia sceptics suggest. Our consciousness of the sensational properties of our perceptual experiences consists in focusing attention on the experiential relation itself. When we adopt a phenomenological stance towards our visual experiences, and visually attend, say, to a nearer tree's taking up twice as much of our visual field as a more distant tree, we surely just are focusing attention on the experiential relation itself, not simply on the objects of visual experience. For the physical objects themselves have not doubled in size. The doubling on which we focus our visual attention is a feature of our visual experience itself, not a feature of the objects of visual experience. In visually attending to the features of our consciousness of external physical objects, the various sensational properties of our visual experiences, we are able to focus attention on the experiential relation itself. So our consciousness of external physical objects is not nearly as transparent and diaphanous as qualia sceptics suppose.

### 9.3 Arguments in Favour of Qualia

Faced with qualia scepticism, qualia proponents have attempted to establish the existence of qualia by employing arguments designed to refute functionalism, namely, the absent and inverted qualia arguments.<sup>23</sup> The *absent qualia* argument appeals to

the possibility of there being functionally identical states only one of which has phenomenal or qualitative character, and concludes that phenomenal character cannot be identified with functional organization. The *inverted qualia* argument appeals to the possibility of there being functionally identical states which are phenomenally or qualitatively inverted with respect to one another, and once again concludes that phenomenal character cannot be identified with functional organization.

Suspensions about the plausibility of qualia inversion and the intelligibility of absent qualia have undermined attempts to establish the existence of qualia based upon arguments from inverted and absent qualia. However, qualia advocates need only appeal to qualia *shifts*, not full qualia *inversions*, to establish the existence of phenomenal or qualitative properties of perceptual experiences. We can directly visually experience qualia shifts simply by closing one eye and staring at a coloured surface long enough to produce retinal fatigue in our open eye, thereby causing the apparent colour of the surface to fade slightly. The coloured surface appears much brighter and saturated when viewed with the eye which was closed. By rapidly alternately viewing the coloured surface with each eye, we can have first-hand experience of a qualia shift which is not vulnerable to scepticism about qualia shifts which occur over a span of time and can therefore be explained away in terms of defective memories.<sup>24</sup>

Visual qualia shifts occur on a more permanent basis in percipients suffering from various forms of retinopathy in which there is damage to the retinal surface of the eye. Pale yellows, for example, can appear white through the afflicted eye. Retinopathy patients enjoy direct visual experience of qualia shifts when they rapidly alternately view a physical object with each eye. In fact, qualia shifts are most pronounced for the sense of smell and the sense of touch. Only moments after entering a room with a distinctive odour, either good or bad, we frequently find that we can no longer smell the odour. The smell can normally be refreshed only by leaving the room for a few moments and then returning. Similarly, soon after putting on a pair of tight socks, we frequently find that we can no longer feel the tightness of their elasticity, that the socks are no longer uncomfortable, or at least not as uncomfortable as they were initially.

Perhaps the most striking examples of sensational, rather than propositional representational, properties of perceptual experience are the double presentations of everyday binocular vision. Reid insightfully notes that "objects which are much nearer to the eyes, or much more distant from them, than that to which the two eyes are

directed, appear double."<sup>25</sup> Many external physical objects visually appear to us doubly even though we do not notice or realize the double appearances, and thus do not propositionally represent the objects as *being* doubled. The fact that perceptual experiences represent the external physical world in a certain way does not entail that they represent the external physical world as *being* a certain way. Our everyday binocular visual experiences represent things in the external physical world doubly without representing those things as *being* double or doubly presented in visual experience. Reid explains that, by force of habit, our attention follows our visual focus. Only by divorcing our visual attention from our visual focus are we able to notice the double presentations of everyday binocular visual experience.

Instead of speaking of the objects to which the eyes are *directed*, Reid should have said that objects which are either considerably nearer or considerably further from the eyes than that upon which the two eyes are *focused* will appear double since it is the focusing of the eyes, and not their directedness, which accounts for the double presentation in binocular vision. This fact can easily be demonstrated by placing one extended index finger directly over the other extended index finger and then gradually bringing the top index finger closer to your eyes. Even though your eyes remain directed at both fingers, one of your fingers, depending upon which finger your eyes are focused on, will appear double. By focusing on one index finger while visually attending to the other, we become aware of the double presentation of one of the fingers. The percipient who is informed of this fact and who then visually attends to the double presentations in his visual field does not "now see otherwise than he saw before," but rather "now attends to what he never attended to before. The same double appearance of an object hath been a thousand times presented to his eye before now; but he did not attend to it."<sup>26</sup> The double appearance was never before "an object of his reflection."<sup>27</sup>

If we follow Peacocke in construing the representational content of an experience in terms of what we are inclined to judge taking the experience at face value, then features of our perceptual experience which we are in no way inclined to make judgments about would constitute the non-representational content of our perceptual experience. Since we are in no way inclined to judge, taking our experiences at face value, that double vision characterizes our everyday binocular visual experiences, the double presentation is not part of the propositional representational content of our experiences, but is instead an intrinsic sensational property of our everyday binocular visual experiences. Just as we do not normally notice, but can visually attend to,



Peacocke's nearer tree taking up a larger portion of our visual field than the further tree, we do not normally notice, but can visually attend to, the double presentation in everyday binocular visual experiences.

Another illustration of sensational, rather than propositional representational, properties of perceptual experience is the small blind spot in each eye where the optic nerve leaves the retinal surface. The blind spot occurs because the optic nerve itself contains no light sensitive cones or rods. Although we are normally visually unaware of these blind spots, so that our visual experience does not represent the visual field as *being* interrupted by two small blind areas, we can nonetheless become directly visually aware of the blind spots simply by positioning our eyes so that light from small objects falls on the part of the retinal surfaces containing the optic nerves.

This effect is easily demonstrated using only a piece of paper, a pencil and a ruler. Draw two small dots approximately two inches apart to the left and right of each other. Close one of your eyes and fix the gaze of your open eye on one of the two dots. If you close your left eye, leaving your right eye open, fix your gaze on the left dot. If you close your right eye, leaving your left eye open, stare at the right dot. Holding the piece of paper approximately one foot in front of your face, slowly bring the paper towards your face. As you do so, the dot which you are *not* staring at will disappear at a certain point. At that distance, light from the dot on the piece of paper is focused on the part of the retinal surface containing the optic nerve. The dot is no longer seen because light from the dot no longer stimulates light sensitive cones and rods. As you continue to bring the piece of paper towards your face, the dot will suddenly reappear as light from the dot is now focused on a part of the retinal surface containing cones and rods. You may need to vary the distance between the two dots slightly to experience the blind spot. You can confirm the blind spot by shifting your gaze, and not simply your visual attention, back and forth between the two dots. If you closed your left eye, leaving your right eye open, then both dots will be visible when you gaze at the right dot, but only the left dot will be visible when you gaze at the left dot. Curiously, you do not experience a dark area where the blind spot is located. Although the dot disappears, the area within the blind spot retains the colour of the surrounding areas of the paper. Even when the dot disappears, your visual experience continues to represent the area where the dot is located as *being* coloured.

The blind spot in each eye is a sensational, rather than propositional representational, property of visual experience since, taking our visual experience at face

value, and in the absence of beliefs to the contrary, we would judge or believe our visual field to be uninterrupted by any blind areas. The blind spot in each eye constitutes a sensational property of our visual experience which we are normally unaware of but to which we can visually attend by a suitable redirection of attention.

The regular interruption to vision which results from blinking is another example of sensational, rather than propositional representational, properties of visual experience. It is conceivable that early humans did not realize that they blinked, and so would not have judged, taking their visual experience at face value, and in the absence of judgments to the contrary, that their vision was regularly interrupted. Birds, dogs and cats all blink, almost certainly without realizing it. It is therefore unlikely that they represent their visual field as *being* regularly briefly interrupted, and thus discontinuous. The discontinuous character of their visual field constitutes a sensational, rather than propositional representational, property of their visual experience since they are not inclined to judge, taking their visual experience at face value, that their visual field is regularly briefly interrupted.

Saccadic eye movements result in a constantly jiggling visual field. These saccadic movements are so subtle that they are rarely noticed by percipients, but are familiar to anyone who has worked with microscopes or other precision optical equipment. The minutely jiggling visual field constitutes a sensational, rather than propositional representational, property of visual experience since we are not inclined to judge, taking our visual experience at face value, that our visual field is constantly jiggling. Taking our visual experience at face value, and in the absence of judgments to the contrary, we are inclined to overestimate the stability of our visual field.

Another way of illustrating phenomenal or qualitative properties of perceptual experience is to contrast everyday perception with apparent cases of perceiving without any conscious phenomenology, such as Baker's research on the alleged magnetic sense of direction in humans.<sup>28</sup> It is well-known that birds navigate during their long migratory flights with the assistance of a magnetic sense of direction. They have an organ of magnetic sense which is sensitive to the orientation of the Earth's magnetic fields, and correct their flight paths with information provided by their magnetic sense. It is less well-known that humans possess a rudimentary magnetic sense of direction, and a corresponding organ of magnetic sense located in the skull. Like recognized sense organs, the organ of magnetic sense in humans is susceptible to masking. Baker

found that a subject's ability to determine directions could be masked by placing small magnets around the subject's head.

Whether or not Baker's experiments actually establish the existence of a magnetic sense of direction in humans is not important. What is important is that a magnetic sense of direction in humans, if it were established, would constitute a form of perception with no conscious phenomenology, no qualitative or phenomenal properties. There is no unique or characteristic way that it feels, no way that it is like for the percipient, to be oriented in one direction rather than another with respect to the Earth's magnetic fields. Subjects who are placed blindfolded in woods simply believe truly that a certain direction is the correct way out of the woods. There is no characteristic North or South feeling. Both blindfolding and placing magnets around the subject's head result in a loss of information from the environment, but only blindfolding causes a change in the way that it is like for the percipient, a change in the qualia of perceptual experience. True beliefs about the correct direction out of the woods simply pop into their heads as a causal result of the action of the environment on their senses, in this instance, their organ of magnetic sense. Informed subjects learn that their true beliefs are acquired by means of their magnetic sense.

We can appreciate what is missing from Armstrong's functionalist account of perception by recognizing what Armstrong's perceptual experiences have in common with magnetic sense experiences, namely, a total lack of any phenomenal or qualitative properties of perceptual experience. If perceptual experience were *nothing but* (1) the acquisition of true beliefs about the environment as a result of the action of the environment on the senses, and (2) the acquisition of the further belief that the true beliefs were acquired by means of the senses,<sup>29</sup> then surely our everyday perceptual experiences would *feel* more like magnetic sense experiences. If perception could be reduced to the acquisition of beliefs or inclinations to believe, without appeal to phenomenal or qualitative properties of perceptual experience, then surely magnetic sense experiences would not seem so alien to us, seeming to be altogether different from everyday perceptual experiences. Baker's research on the human magnetic sense of direction shows that Armstrong's and Pitcher's belief-based reductions of perceiving neglect an essential ingredient of everyday perceptual experiences, namely, their characteristic phenomenal or qualitative properties. Only by contrasting magnetic sense experiences with visual or aural experiences can we fully appreciate what is present in everyday perceptual experiences but absent in magnetic sense experiences, namely, qualia of perceptual experience.

Baker's subjects satisfy Armstrong's criteria for perceiving, but clearly lack something in their magnetic sense experiences which they do not lack in their visual and auditory experiences. What they lack is the experience of phenomenal or qualitative properties of perceptual experience, or qualia. There is no unique way that it is like for them to perceive magnetically. There are no characteristic features or properties of their magnetic sense experiences. In informed subjects, there is only the acquisition of true beliefs about the environment and the acquisition of the further belief that the true beliefs were acquired by means of the organ of magnetic sense.

Armstrong reduces perceptual experiences to sense-impressions, and analyses sense-impressions in terms of the acquisition of beliefs or inclinations to believe things about the external physical world by means of the senses together with the further belief that we have acquired these beliefs by means of the senses. But even the blind-sighted and percipients exercising their magnetic sense of direction can both acquire a belief or inclination to believe things about the external physical world by means of their senses and acquire the belief that they have done so by means of their senses. There must be more to having sense-impressions than Armstrong alleges, for the blind-sighted and percipients exercising their magnetic sense of direction surely lack something that we possess, something which is not reducible to mere beliefs about the world and further beliefs about the way that we have acquired those beliefs. Knowing how our perceptual beliefs were acquired is insufficient for capturing the phenomenal or qualitative character of our perceptual experiences.

Not all philosophers of perception are convinced by the qualia sceptic's insistence that perceptual experience itself is wholly transparent or diaphanous, that introspection reveals only properties of external physical objects, and never properties of perceptual experience itself. According to the qualia sceptic, the very act of introspecting a perceptual experience must be futile since we cannot help but look through perceptual experience to its objects. However, as Carruthers points out, "It is of course possible to pay attention to one's conscious experiences, as when I attempt a phenomenological description of my visual field."<sup>30</sup> Hirst explicitly allows that we can attend to our experiences themselves while having them, rather than simply attending to their objects.<sup>31</sup> The notion that perceptual experience is wholly transparent or diaphanous implies that we cannot describe our perceptual experiences, but can instead describe only the objects of our perceptual experiences. But we can describe our perceptual experiences themselves, rather than merely describing external physical objects, when



we adopt what Quinton refers to as "the appropriate, sophisticated, phenomenological frame of mind."<sup>32</sup>

The qualia sceptic's transparency thesis about perceptual experience is false if introspection reveals properties distinct from intrinsic properties of external physical objects. Binocular double presentations, retinal blind spots, saccadic eye movements and interruptions to the visual field which result from blinking are all introspectible properties of our visual experiences which do not constitute propositional representational properties of our visual experiences and cannot plausibly be identified with intrinsic properties of external physical objects. They must therefore be sensational properties of our visual experiences, or qualia.

Similarly, the subjective colour appearing involved in viewing a spinning Benham's disk and the subjective unequal look of the Müller-Lyer figure are idiosyncratic of human visual processing, and thus intrinsic properties of our visual experiences themselves, rather than intrinsic properties of any external physical objects. Our awareness of Benham's colours and the unequal look of the Müller-Lyer figure just is awareness of the intrinsic qualities of our visual experiences. Benham's colours cannot be identified with either the spinning black and white Benham's disk itself or an objective and public, physical appearance of the disk. Phenomena like Benham's colours and the unequal look of the Müller-Lyer figure show that perceptual experience is not transparent and diaphanous, as the qualia sceptic alleges, but instead possesses features or properties to which we can attend by a suitable redirection of attention. Benham's colours and the unequal look of the Müller-Lyer figure need not be viewed as problematic, inner non-physical existents in order to be regarded as numerically distinct from intrinsic properties of external physical objects, and thereby qualify as properties of visual experience itself.

Surely binocular percipients enjoy something which monocular percipients lack, something to which binocular percipients have introspective access if they redirect their visual attention as Reid instructed. The double presentation to which binocular percipients alone can attend is a sensational property of their binocular visual experiences which cannot be reduced to the propositional representational content of the visual experiences. When we look at a tree but our eyes are focused on something either nearer to or further from us than the tree, we can turn our attention to the double presentation of the tree, and thereby turn our attention to an intrinsic feature of our binocular visual experience itself, rather than any feature or property of objects of



perceptual experience. Certainly, the double presentation which we turn our attention to is not a feature of the presented tree itself. When we attend to the double presentation, we attend to a quality of our visual experience, not to a quality of the tree.

Peacocke explicitly appeals to the difference between monocular and binocular vision in arguing for irreducibly sensational properties of visual experience. He argues that the experience had by viewing a scene with both eyes is different than the experience had by viewing the scene with only one eye, even though the experiences have the same representational content.<sup>33</sup> However, Peacocke concentrates on the fact that only binocular visual experiences contain any dimension of depth,<sup>34</sup> rather than appealing to the double presentations in binocular vision. His brief discussion of the double presentations of binocular vision suggests that he discounts the value of double presentations in efforts to establish the existence of irreducibly sensational properties of visual experience. He may believe that double presentations are not candidates for sensational properties because they constitute part of the propositional representational content of binocular visual experiences, and thus part of what we would judge to be the case taking our binocular visual experiences at face value.

But since I regard Reid's comments on the double presentations of everyday binocular vision as genuinely informative, and believe that we are not ordinarily inclined to judge, taking our binocular visual experiences at face value, that we are doubly presented in everyday binocular vision, I do not believe that the double presentations constitute part of the propositional representational content of our binocular visual experiences. Because I regard the double presentations as intrinsic to binocular visual experiences, I conclude that the double presentations are sensational properties of binocular visual experiences. Since monocular and binocular visual experiences need not differ with respect to their propositional representational content, such as in monocular and binocular visual experiences of extremely remote objects, the intrinsic difference between them must be due to a difference in sensational properties of experience.

Tye resists postulating qualia by denying that monocular and binocular visual experiences have the same propositional representational content. He maintains that the propositional representational content differs after all because more of a situation is seen in binocular vision.<sup>35</sup> If monocular and binocular visual experiences have different propositional representational contents, then an intrinsic difference between the

experiences need not be accounted for in terms of a difference in sensational properties of experience, or qualia.

However, the qualia advocate need not maintain that absolutely all propositional representational content remains the same in monocular and binocular visual experiences. All that is required is that *relevant aspects* of the propositional representational content remain the same, such as the representation of the number of items seen in the centre of the visual field. If the representation of the number of items in the centre of the visual field remains the same in monocular and binocular vision, then the intrinsic difference between the experiences must be a difference in the qualia of experience. The doubling of appearances in the centre of the visual field in binocular vision is not plausibly explained by the fact that we see more of a situation in binocular vision. Even extremely distant objects appear double when we focus on something nearby. We surely do not see more of these distant objects simply by viewing them with both eyes while focusing on nearer objects. The fact that we see more of nearer objects does not, in itself, explain why we see extremely distant objects doubly.

The qualia advocate can therefore maintain that, although there is an overall difference in propositional representational content between monocular and binocular visual experiences, there is no difference in propositional representational content in relevant respects, namely, in the representation of the number of distant objects in the centre of the visual field. If propositional representational content remains the same in relevant respects, then the intrinsic difference between monocular and binocular visual experiences is plausibly explained in terms of a difference in sensational properties of experience, or qualia. The felt difference between monocular and binocular visual experiences is not solely a difference in propositional representational content.

#### 9.4 What It Is Like To Perceive

Farrell, Hirst, Sprigge and Nagel all characterize the phenomenal, qualitative or subjective character of perceptual experience in terms of there being a way that it is like to be the subject of the experience, a way that it is like *for* the perceiver.<sup>36</sup> Farrell characterizes the experience of a Martian in terms of "what it would be like to be" a Martian.<sup>37</sup> He anticipates Nagel when he explicitly considers "what it would be like to be, and hear like, a bat."<sup>38</sup> Hirst holds that conscious experience of an object is what it is like to perceive the object.<sup>39</sup> What it is like to have perceptual experience E is simply to have E consciously. Nagel argues that an organism has conscious experiences "if and

only if there is something that it is like to *be* that organism--something it is like *for* the organism."<sup>40</sup> His notion of what it is like for the percipient is meant to capture the experiential character of conscious perceptual experience. Armstrong's functionalist causal theory of the mind leaves out what it is like to be in the states which are both apt to be caused by events in the external physical world and apt to cause certain sorts of discriminatory behaviour. Searle aptly describes Armstrong's notion that perceptual experiences have absolutely no internal phenomenological qualities whatsoever as an "amazing view"<sup>41</sup> since it entails that there is nothing that it feels like to perceive something, no way that it is like to perceive. Our comparison of Armstrong's sense experiences with magnetic sense experiences showed that Armstrong's perceptual experiences are devoid of any way that it is like for the percipient to perceive.

Having maintained that an organism *has* a conscious experience only if there is a way that it is like to *be* the organism, Nagel goes on to link *knowing* or *understanding* what an experience is like to the ability to *imagine* or *conceive* what the experience is like. Influenced by Nagel, many philosophers of perception have linked there *being* a way that it is like consciously to perceive with *knowing* what it is like to perceive. But since there is no necessary, essential or conceptual connection between perceptual experience and judgment, knowledge or belief, simply having a perceptual experience is insufficient for knowing anything at all, and thus insufficient for knowing what it is like to have the perceptual experience.

There can be a way that it is like for us perceptually to experience X without our having to *know* what it is like perceptually to experience X. Even a creature who knows nothing at all might still have perceptual experiences and thereby experience, although not know, what it is like to have them. To identify there *being* a way that it is like with *knowing* what it is like is to tie consciousness to knowledge, thereby denying conscious, what it is like, states to a being wholly incapable of learning or knowing. A creature with absolutely no memory, and hence no capacity to learn, and thus know, might still undergo experiences with a conscious phenomenal or qualitative character. There might *be* a way that it is like for the creature to be appeared to redly without the creature *knowing* anything at all, and thus without the creature knowing what it is like to be appeared to redly.

In order to *have* a conscious perceptual experience, there must *be* a way that it is like for the percipient. But the percipient need not know, or be able to imagine or conceive, what it is like to have a conscious perceptual experience simply for there to *be*

a way that it is like for the percipient. Non-epistemic theorists insist that being conscious and being cognizant are altogether distinct matters, and that being cognizant is not a necessary condition of being conscious. What it is like consciously to perceive X is simply what it is like for X to look or appear some way to us.

Faced with the qualia scepticism of physicalists and materialists, qualia proponents employ an argument from knowledge in an attempt to establish that differences in knowledge between actual and counterfactual situations, such as the difference in knowledge which results when Jackson's brilliant neuroscientist Mary leaves her black and white room for the first time, must be accounted for in terms of a difference in *what* is known.<sup>42</sup> Qualia proponents assume that the same type of knowledge is involved in the actual and counterfactual situations, namely, factual or propositional knowledge, and conclude that the difference in knowledge between actual and counterfactual situations must be a difference in *what* is known, in *facts* which are known, and that Mary must therefore learn new *facts* when she leaves her black and white room. They then reason that, if Mary knew all of the physical facts about colour experience before leaving her black and white room, then physicalism, the view that all facts are ultimately physical facts, must be false. At least some facts about colour experience are not physical facts, namely, facts about what it is like actually to enjoy colour experiences. Jackson argues that Mary's problem when she was confined to her black and white room was, not that she could not imagine what it is like to sense red, but rather that she could not know what it is like to sense red.

The knowledge argument holds that, since we cannot have a bat's experiences, we cannot know what it is like to have a bat's experiences. But since we can know all of the physical facts involved in a bat's having experiences, there must be facts about the bat's having experiences which are not physical facts. So physicalism, or the thesis that all facts are ultimately physical facts, must be false. The argument from knowledge applied to colours maintains that complete and exhaustive knowledge of the physical facts involved in perceiving colours is insufficient for knowledge of what colours look like, of what it is like to perceive colours. The knowledge argument is intended to establish that there is a way that it is like consciously to undergo an experience which is not reducible to knowledge of physical facts, that there are irreducibly phenomenal or qualitative facts about experience, or qualia of experience. Since Jackson's brilliant neuroscientist Mary would learn something at least upon leaving her black and white room and enjoying her first colour experiences, knowing all of the physical facts

involved in having colour experiences is insufficient for knowing what it is like consciously to undergo colour experiences.

Qualia skeptics, such as physicalists and materialists, simply reject the qualia proponent's assumption that the same sort of knowledge is involved in the actual and counterfactual situations. They argue that there is a difference only in *how* one knows, a difference in the knowledge relation itself, rather than a difference in *what* is known. If different sorts of knowledge are involved, then the difference in knowledge which everyone agrees would occur between the actual and counterfactual situations need not be a matter of learning new *facts*. If the counterfactual situation need not involve learning new facts, then the knowledge argument does not show that some facts about experience slip through the physicalist's net of purely physical facts.

Nemirow, Lewis, Levin, Mellor and Tye all attempt to defuse the knowledge argument by conceding that something new would be learned in the counterfactual situation, but denying that what would be learned must be a new *fact*.<sup>43</sup> They accept that there is a genuine difference in knowledge between actual and counterfactual situations, but deny that it is a difference in *what* is known, a *fact*, insisting instead that it is a difference in the *knowing* itself, a difference in knowing *how*. They claim that subjects in counterfactual situations acquire new capacities, skills or abilities, rather than knowledge *that*, insisting that the counterfactual situations involve new, *practical* ways of knowing old facts, rather than old, *propositional* ways of knowing new facts. Counterfactual situations involve the acquisition of practical knowledge, of knowledge by acquaintance, of what was previously known only by description. If the actual and counterfactual situations need not involve the same kind of knowledge, then the counterfactual situation need not be a matter of learning new facts. Since the knowledge argument does not show that Mary did not know all of the facts about colour experience when she was confined to her black and white room, qualia sceptics conclude that the qualia proponent has not succeeded in showing that at least some facts are not physical facts.

Lewis explains that "The Ability Hypothesis says that knowing what an experience is like just is the possession of these abilities to remember, imagine, and recognize. It isn't the possession of any kind of information....It isn't knowing-that. It's knowing how."<sup>44</sup> Ignoring the fact that we both can and do teach people *how* to do things, he implausibly argues that the reason why we cannot teach someone what an experience is like is because lessons only impart information, not abilities. Lewis



concludes that learning what an experience is like means acquiring the ability to remember, imagine and recognize, rather than acquiring certain facts. Levin similarly attempts to account for the knowledge difference in terms of the acquisition of an ability to apply certain concepts rather than the acquisition of factual knowledge.<sup>45</sup> Following Nemirow and Lewis, Mellor argues that there is no *fact* of there being a way that it is like which we know when we know what it is like to have an experience, that "apparent facts about what experiences are like are false projections of another kind of knowledge."<sup>46</sup> Qualia sceptics deny that Jackson's brilliant neuroscientist Mary would learn any new facts upon leaving her black and white room. They concede that Mary would learn something upon leaving the room, but all she would learn is what colour experiences are phenomenally like. She would learn a new way of knowing old familiar facts, knowing them now by introspective awareness, whereas she knew them before by other, less direct, means. Qualia sceptics believe that Mary's learning what it is like to undergo colour experiences does not entail that Mary learns any new facts.

Against Nemirow and Lewis, Jackson argues that Mary will not just acquire new abilities, new ways of knowing old facts, but will also acquire factual knowledge.<sup>47</sup> She will acquire more than just practical knowledge in the counterfactual situation. Surely Mary will at least learn *that* there is practical knowledge to be acquired by leaving her black and white room, and this *just is* the acquisition of new, *factual* knowledge, rather than just the acquisition of a new way of knowing old facts. One of the facts which Mary would learn upon leaving her black and white room and learning first-hand what colour experiences are like phenomenally is the fact *that* colour experiences *have* a phenomenal character, that there *is* a way that it is like to undergo colour experiences.

Until Mary has her first colour experience, she might doubt whether there is anything phenomenal involved in having colour experiences. Before enjoying her first colour experience, she might imagine that colour experiences, like magnetic sense experiences, are wholly devoid of any phenomenal or qualitative character. Just as it does not phenomenally or qualitatively feel any particular way to be pointed towards magnetic North, Mary might suspect that it does not phenomenally or qualitatively feel any particular way to be appeared to redly. But once Mary has her first colour experience of red, she learns, not just what it is like to undergo colour experiences of red, what colour experiences of red are phenomenally like, but also *that* colour experiences of red, in fact, have a way that it is like to undergo them, indeed, *that* there is such a thing as learning what colour experiences of red are phenomenally like. Surely the very act of learning *that* she can learn what colour experiences are phenomenally

like simply by having them shows that Mary would learn that there is, in fact, something decidedly phenomenal to having colour experiences. Mary would thus learn at least some new facts simply by having her first colour experiences and learning first hand that there is, after all, a phenomenology to be enjoyed, unlike the case of the magnetic sense of direction. Learning these new facts could not plausibly be construed as simply a matter of learning new ways of knowing old facts.

The problem for physicalism is, not that a purely physical system cannot *know* what it is like to undergo an experience with a conscious phenomenal character, but rather that there cannot *be* a way that it is like for a purely physical system to undergo an experience with a conscious phenomenal character. In Russell's phrase, there can be no "centre of illumination" in a purely physical system. Since there is no way that it is like to be a purely physical system, there can be no way that it is like for a purely physical system to undergo a conscious experience, and thus no way that a purely physical system can know what it is like to undergo a conscious experience. In the absence of any subjective perspective on things, a purely physical system is wholly incapable of experiences of things, and is thus incapable of knowing what the experience of things is like.

- 1 Sydney Shoemaker, "Qualities and Qualia: What's in the Mind?" *Philosophy and Phenomenological Research* 50 (1990), supplement, p. 115.
- 2 Christopher Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, Oxford: Oxford University Press, 1983, p. 5 ff.
- 3 *Ibid.*, p. 93.
- 4 *Ibid.*, p. 5.
- 5 *Ibid.*, p. 13.
- 6 Colin McGinn, *Mental Content*, Oxford: Basil Blackwell Ltd., 1991, p. 75.
- 7 *Ibid.*, p. 74.
- 8 Colin McGinn, *The Character of Mind*, Oxford: Oxford University Press, 1982, p. 9.
- 9 Shoemaker, "Qualities and Qualia: What's in the Mind?" p. 114.
- 10 Michael Tye, "Visual Qualia and Visual Content," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992, p. 159.
- 11 *Ibid.*, p. 173.
- 12 Bertrand Russell, *Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984, p. 43.
- 13 B.A. Farrell, "Experience," *Mind* 59 (1950), p. 183.
- 14 D.M. Armstrong, "Intentionality, Perception, and Causality: Reflections on John Searle's *Intentionality*," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993, p. 155.
- 15 *Ibid.*
- 16 *Ibid.*
- 17 *Ibid.*, p. 156.
- 18 See Daniel C. Dennett, "Quining Qualia," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 519-47, Gilbert Harman, "The Intrinsic Quality of Experience," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing

Company, 1990, pp. 31-52 and Michael E. Levin, "Phenomenal Properties," *Philosophy and Phenomenological Research* 42 (1981-82), pp. 42-58.

19 Harman, "The Intrinsic Quality of Experience," p. 39.

20 *Ibid.*

21 J.J. Valberg, "The Puzzle of Experience," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992, p. 18.

22 McGinn, *The Character of Mind*, p. 13.

23 See Ned Block, "Are Absent Qualia Impossible?" *Philosophical Review* 89 (1980), pp. 257-74 and "Inverted Earth," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990, pp. 53-79. See also Sydney Shoemaker, "Functionalism and Qualia," in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980, pp. 251-67, "Absent Qualia are Impossible-A Reply to Block," *Philosophical Review* 90 (1981), pp. 581-99 and "The Inverted Spectrum," *Journal of Philosophy* 79 (1982), pp. 357-81.

24 See Dennett, "Quining Qualia," p. 531, for an attempt to explain away evidence of qualia in terms of unreliable memories.

25 Thomas Reid, *An Inquiry Into the Human Mind*, Timothy Duggan (ed.), Chicago: The University of Chicago Press, 1970, p. 161-2.

26 *Ibid.*, p. 162.

27 *Ibid.*, pp. 162-3.

28 Robin R. Baker, "A Sense of Magnetism," *New Scientist* 87 (1980), pp. 844-6.

29 D.M. Armstrong, *Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961, pp. 113-4.

30 Peter Carruthers, "Brute Experience," *Journal of Philosophy* 86 (1989), p. 262.

31 R.J. Hirst, "Perception, Science and Common Sense," *Mind* 60 (1951), p. 497.

32 Anthony M. Quinton, "The Problem of Perception," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965, p. 507.

33 Peacocke, *Sense and Content: Experience, Thought, and Their Relations*, p. 13.

34 *Ibid.*

35 Tye, "Visual Qualia and Visual Content," p. 174.

36 See Farrell, "Experience," R.J. Hirst, "Philosophical Conclusions," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964, pp. 316-

- 35, Timothy L.S. Sprigge, "Final Causes," *Proceedings of the Aristotelian Society*, supplementary volume 45 (1971), pp. 149-70 and Thomas Nagel, "What Is It Like to Be a Bat?" in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980, 159-68.
- 37 Farrell, "Experience," p. 177.
- 38 *Ibid.*, p. 183.
- 39 Hirst, "Philosophical Conclusions," p. 326.
- 40 Nagel, "What Is It Like to Be a Bat?" p. 160.
- 41 John R. Searle, "Response: Perception and the Satisfactions of Intentionality" in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993, p. 184.
- 42 See Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly* 32 (1982), pp. 127-36 and "What Mary Didn't Know," *Journal of Philosophy* 83 (1986), pp. 291-5.
- 43 See Laurence Nemirow, "Physicalism and the Cognitive Role of Acquaintance," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 490-9, David Lewis, "What Experience Teaches," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 499-519, Janet Levin, "Could Love Be Like A Heatwave? Physicalism and the Subjective Character of Experience," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992, pp. 478-90, and D.H. Mellor, "Nothing Like Experience," *Proceedings of the Aristotelian Society*, new series 93 (1993), pp. 1-16.
- 44 Lewis, "What Experience Teaches," p. 516.
- 45 Levin, "Could Love Be Like A Heatwave? Physicalism and the Subjective Character of Experience," p. 486.
- 46 Mellor, "Nothing Like Experience," p. 2.
- 47 Jackson, "What Mary Didn't Know," p. 294.



## Chapter 10

### Acquaintance, Physical Objects, and Knowledge of the Self

#### 10.1 Introduction

There have been several recent attempts in the philosophical literature to accommodate alternative epistemological and metaphysical systems within the general framework of Russell's notion of acquaintance. Christopher Peacocke, Mark Sainsbury and David Woodruff Smith have each advanced a model of perception which holds that physical objects in the world, and not just sense-data, are possible objects of Russellian acquaintance.

But Russell's notion of acquaintance is profoundly inappropriate to the direct realist theory of perception. Any attempt to expand the extension of Russellian acquaintance entails abandoning central elements in Russell's notion of acquaintance. In my assessment of the applicability of Russellian acquaintance to direct realism, I will also examine Russell's position on the problem of knowledge of the self since these two problems are closely connected, and since Russell's views on the nature of acquaintance could have been developed in a way which would have allowed for acquaintance with the self.

Like many of his philosophical views, Russell's views on acquaintance underwent considerable revision throughout his lifetime. Although Russell later backed away from the notion of acquaintance, contemporary commentators continue to employ his distinction between knowledge by acquaintance and knowledge by description and to be inspired by his analysis of experience in terms of the relation of direct presentation. In their attempts to reconstruct Russellian acquaintance, contemporary commentators appeal to Russell's earlier views, setting aside his subsequent reservations about the notion of acquaintance. Evaluating Russell's philosophical legacy therefore requires singling out the views on acquaintance which he held at the beginning of this century. But in focusing on these earlier views, it must be remembered that Russell's ideas on acquaintance were subject to constant revision.

Russellian acquaintance remains attractive to contemporary commentators largely because modern philosophers grapple with many of the same problems which

fascinated Russell. Nowhere is this clearer than in the case of the problem of the elusiveness of the self in introspection. In his 1913 manuscript, *Theory of Knowledge*, Russell claims that "We can easily become aware of our own experiences, but we seem never to become aware of the subject itself."<sup>1</sup> Heavily influenced by Russell, Colin McGinn believes that, "When you are aware of your experience as of the setting sun, you are aware of the experience as *your* experience as of the setting sun,"<sup>2</sup> even though the self is not the proper object of introspective awareness or self-consciousness. Like Russell, Michael E. Levin is interested in the identity of the subject of second-order awareness, or awareness of an awareness. Levin argues that, "When I am aware of my awareness of my foot, what is the 'I' that has this second-order awareness? I can see no reason why it cannot be the same 'I' that is its object--the central nervous system, or whatever persons turn out actually to be."<sup>3</sup> Struggling with the very same problems, it is only natural that contemporary commentators should help themselves to Russell's analytical apparatus, and employ reconstructed versions of Russellian acquaintance.

Philosophers of perception have generally focused on questions like: What are the direct or immediate objects of perception? But an equally interesting question is: What do we know when we know we perceive? Russell's initial answer to this question is in terms of acquaintance with the self. In *The Problems of Philosophy*, he is willing to allow that "in some sense it would seem we must be acquainted with our Selves as opposed to our particular experiences....although acquaintance with ourselves seems *probably* to occur, it is not wise to assert that it undoubtedly does occur."<sup>4</sup> Thereafter, Russell slid further into skepticism about the self, first, by denying that we are ever acquainted with the self, and maintaining instead that we are merely acquainted with complexes in which acquaintance is a constituent, and finally, by rejecting altogether the notion of a substantive self, choosing instead to "regard the subject...as a logical construction."<sup>5</sup>

Laboring under the shadow of Hume, Russell was persuaded by the Humean case against awareness of a bare self. Yet, within Russell's notion of acquaintance lay all of the necessary ingredients for an account of acquaintance with the self which does not depend upon catching glimpses of a bare self. The solution lies in Russell's largely overlooked notion of learning to be acquainted with objects.

## 10.2 Russell's Notion of Acquaintance

Russell divides all knowledge into two categories: knowledge of truths and knowledge of things. He then distinguishes between two sorts of knowledge of things: knowledge by acquaintance and knowledge by description, although he insists at one point that "Immediate experience" is "the only real knowledge of things."<sup>6</sup> One has knowledge by acquaintance of an object or thing when that knowledge is direct or immediate, and is not the result of any process of inference. Something is known by acquaintance when it stands in the relation of presentation, or is directly presented, to the knower. Russell maintains that we are acquainted with our own sense-data, with universal properties and relations, and, at least in his earlier writings, with ourselves. He warns us that "among the objects with which we are acquainted are not included physical objects (as opposed to sense-data), nor other people's minds."<sup>7</sup>

For Russell, a physical object is "an inference"<sup>8</sup> or "theoretical construction."<sup>9</sup> We cannot be acquainted with physical objects because mere inferences or theoretical constructions cannot be the object of any presentation. Yet, abstract mathematical facts are no more ontologically robust than theoretical constructions, and Russell holds that such abstract facts can be objects of presentation. Perhaps the difference lies in the fact that theoretical constructions, unlike abstract mathematical facts, are something which we create, rather than discover, and are thus not part of mind-independent reality. But Russell also holds that we are presented, and thus acquainted, with the objects of our own imagination, and these imagined objects are no less created by us than our theoretical constructions.

Russell employs the terms "acquaintance," "awareness" and "experience" synonymously.<sup>10</sup> He explains that "when A experiences an object O, we shall say that A is acquainted with O."<sup>11</sup> Although it is possible to be acquainted with, or aware of, one's own acquaintance with O, one cannot be acquainted with, or aware of, anyone else's acquaintance with O. In Russell's words: "The experiencing of O by A may be experienced by A, and the experiencing of O by B may be experienced by B, but neither can experience the other's experiencing."<sup>12</sup> Russell believes that it is the ability to experience our experiencing which best explains our arriving at the notion that we have experiences. He insists that "there is such a fact as 'experiencing', and...this fact itself may be experienced."<sup>13</sup> What best explains our arriving at the notion that we have perceptual experiences is thus the experiencing of our perceptual experiences, or the experiencing of our perceiving.

### 10.3 The Attempt to Apply Russellian Acquaintance to Physical Objects

Christopher Peacocke offers a "reconstruction of Russell's concept of acquaintance" involving "modes of presentation," or "m.p.'s," such that we "need to use a three-place relation between a person, object, and type of m.p.: that of the person being acquainted with that object relative to that type."<sup>14</sup> While Russell views acquaintance as a direct, two-term or dyadic relation between subject and object, Peacocke reconstructs Russellian acquaintance in terms of a three-term or triadic relation. Peacocke explains that "I am acquainted with the pen I am now using relative to a certain perceptual type of m.p., which presents a pen in a certain way in my visual field."<sup>15</sup> He claims that the merit of his analysis is that it preserves a feature of the "Russellian conception" inasmuch as it retains the idea that "in being acquainted with something the subject is able to think of it in a particular way in virtue of his bearing a certain *relation* to it."<sup>16</sup> Peacocke thus rejects Russell's views about the extension of the notion of acquaintance, and expands the notion to include physical objects in the world as possible objects of acquaintance.

In fairness to Peacocke, Russell's talk of the objects of acquaintance being "presented to" the subject suggests that the objects have a mode of being presented, a mode of presentation. Russell also insists that the relation of acquaintance is simply the converse relation of the relation of presentation, so that *S*'s being acquainted with *O* is merely *O* being presented to *S*. But Russell builds more than mere presentation into his notion of acquaintance. Any reconstruction of Russell's notion of acquaintance which neglects these additional elements cannot do justice to Russell's original contrast between knowledge by acquaintance and knowledge by description.

Certainly, any talk of our "bearing a certain *relation*" to objects of acquaintance, where these relations are anything other than the relations of acquaintance and presentation, conflicts with Russell's firm position that an object of acquaintance in, say, our visual space, is known "perfectly and completely when I see it, and no further knowledge of it itself is even theoretically possible."<sup>17</sup> Since anything known from a particular perspective or point of view may at least theoretically be known from an alternative perspective or point of view, our knowledge of it will be incomplete, and thus imperfect. It will always be at least theoretically possible to acquire further knowledge of whatever is known only from one perspective or point of view. Peacocke's suggestion that "*a* is acquainted with *x* relative to *M*"<sup>18</sup> is surely to admit that *x* is not known completely, perfectly and indubitably, but is instead known only relative to that *M*.

In raising this objection from perspectival limitations, I have in mind Russell's claim that, "If I say 'this', pointing to some visible object, what another man sees is not exactly the same as what I see, because he looks from a different place."<sup>19</sup> If what we see is different from what others see, due to the fact that we look from different places or points of view, then what we see is incomplete and imperfect to the extent that it omits the theoretically obtainable perspectives of others. A perspective which admits supplemental perspectives or points of view is incomplete and imperfect.

Russell also insists that "the one physical object which is supposed to be seen from different points of view is a theoretical construction, and is not the object of any presentation."<sup>20</sup> There can be no acquaintance with a physical object because there can be no presentation of a mere theoretical construction. Anything given to different perspectives or points of view is a theoretical or logical construction, and thus never an object of direct presentation or acquaintance. Objects of presentation are not given from points of view, and are therefore not subject to perspectival limitations or distortion. The fact that the objects of direct visual presentation are "immediate visual data from the different points of view"<sup>21</sup> does not entail that we are acquainted with that data only relative to those points of view. It is our acquisition of, rather than our acquaintance with, the visual data which is relative to different perspectives or points of view.

Peacocke's talk of modes of presentation is harmless if what he has in mind are simply perceptual modalities, analogous to Russell's private visual, tactual and aural spaces. But if Peacocke means that we are acquainted with an object relative to a certain perspective or point of view, then his analysis in terms of modes of presentation conflicts seriously with Russell's important stipulation that what is known by acquaintance be known perfectly and completely. There is certainly no room within Russell's account for Peacocke's talk of objects of acquaintance being "clothed with an m.p."<sup>22</sup>

Like Peacocke, Mark Sainsbury explicitly rejects Russell's extension of the notion of acquaintance. Reconstructing Russellian acquaintance, Sainsbury concludes that "Russell's arguments concerning the objects of acquaintance seem to me beyond repair. A correct account, in my view, would show that tables and other physical objects are objects of acquaintance, and would do so by analysing acquaintance in terms of causation and information."<sup>23</sup> Sainsbury argues that "It is possible to accept Russell's concept of acquaintance, yet reject his views about what the objects of acquaintance



are."<sup>24</sup> But if acquaintance is causal, then it is also perspectival, and thus incomplete or partial. For it will always be at least theoretically possible for an alternative causal relation to obtain, and for further information concerning the object of acquaintance to be acquired. Any knowledge of an object which allows at least theoretical room for the acquisition of additional information cannot be infallible and indubitable, and so cannot be a species of Russellian acquaintance.

David Woodruff Smith also reconstructs Russellian acquaintance, arguing that "acquaintance, applied to perception, entails the epistemological doctrine of naive or direct realism, according to which we directly perceive physical objects."<sup>25</sup> Although Smith claims to follow Russell in preferring the term "acquaintance" to the term "intuition," his insistence that "we are acquainted in perception with physical objects"<sup>26</sup> is profoundly incompatible with Russellian acquaintance. Smith's views on acquaintance diverge from Russell's views in more subtle ways. He states that "Acquaintance is a *direct* cognitive awareness of something. Fundamentally, acquaintance is an *intentional* relation. But one is acquainted with something only if it exists: so acquaintance is a successful intentional relation."<sup>27</sup>

Russell maintains that we are acquainted both with things which exist, such as sense-data, and with things which merely subsist, such as universal properties and relations. The relation of acquaintance itself is a two-term relation which "can subsist between subjects and other entities."<sup>28</sup> Having mistakenly argued that we are acquainted only with things which exist, Smith is then forced to distinguish between acquaintance and "'acquainting' experience."<sup>29</sup> An acquainting experience is an experience in which "no existing object satisfies the content of the experience."<sup>30</sup> An acquainting experience is thus "a *cognitive* experience in that it 'posits' its object as existing or actual."<sup>31</sup>

Although Russell regards acquaintance with subsisting universals as a cognitive relation, he denies that these things are merely posited. For Russell, the things in the world with which we are acquainted, whether existing or merely subsisting, are objective features of the world which we must discover as cognizers. The subsisting things with which we are acquainted are thus presented to, rather than merely posited by, us. Russell simply makes no provision for a non-presentational, positing species of acquaintance. On Russell's analysis, it is meaningless or incoherent to suppose that objects of acquaintance might be unreal. The term "unreal" is applicable only to described entities, and not to entities to which it is possible to give a proper name.

Russell explains that "An acquaintance which is acquainted with nothing is not an acquaintance, but a mere absurdity."<sup>32</sup>

I certainly do not wish to deny that we are acquainted with physical objects in the world. What I am denying is the possibility of reconciling a Russellian account of acquaintance, or at least an account which is held to be in accordance with the spirit of Russell's general ideas, with a theory of perception which maintains that we are acquainted with physical objects. Acquaintance with opaque physical objects in the world would be from one perspective or point of view alone, and, as such, would constitute awareness or knowledge which was less than perfect and complete. It certainly would not qualify as awareness in which no further knowledge is even theoretically possible. If philosophers wish to speak in terms of acquaintance with physical objects, then they must be careful not to suggest that the acquaintance involved is Russellian, or in the spirit of Russell's general ideas. They must admit openly that they are reverting to a less restricted, perhaps Lockean, version of the notion of acquaintance.

W.V. Quine points out that "Russell's ontology was conditioned conspicuously by both his theory of knowledge and his logic."<sup>33</sup> Russell severely restricted the possible objects of immediate experience through acquaintance because the model of immediate cognition under which he operated viewed direct or immediate knowledge, not simply as non-inferential, but also as complete, perfect, infallible and indubitable. In this way, his ontology of possible objects of acquaintance was conditioned by his model of immediate cognition. R.J. Hirst labels this "belief that perception is or contains an always immediate and intuitive, and so unvaryingly excellent, mode of awareness"<sup>34</sup> the "immediacy assumption."

#### 10.4 The Indubitability of the Objects of Acquaintance

Peacocke complains that the "implausible components" of Russell's views are a consequence of "his underlying presupposition...that the existence of anything with which one is acquainted must be known to one indubitably. We can call this 'the Indubitability Assumption'. The Indubitability Assumption immediately restricts the range of objects with which a thinker may be acquainted."<sup>35</sup> A.J. Ayer explains that, on Russell's account of acquaintance, "when an object is known by acquaintance, its existence is not open to doubt; but the existence of objects which are known only by description is problematic."<sup>36</sup> Ayer claims that Russell "took it to follow from the fact

that one was acquainted with a particular object, both that the object really existed and that it had the properties which it appeared to have."<sup>37</sup> Yet, Russell's inclusion of the notion of completeness in his account of acquaintance results in a third entailment not mentioned by Ayer, namely, that the object of acquaintance have *only* the properties which it appears to have.

Some philosophers have questioned whether Russell held that acquaintance entails indubitability, or whether the Indubitability Assumption is an essential element in Russell's notion of acquaintance. Interpreting rather than reconstructing Russell, Sainsbury suggests that it is possible that Russell "did not believe that indubitability is constitutive of the nature of acquaintance. The indubitability of sense data are due to special features of these objects, rather than to the mere fact that we are acquainted with them."<sup>38</sup> But Sainsbury is surely mistaken about indubitability not being constitutive of Russellian acquaintance. The fact that there is room for doubt concerning propositions which arise from acquaintance with certain facts does not entail that the doubt concerns the existence of those facts themselves. We may suspect that we have mis-analyzed a complex fact, incorrectly separating out its constitutive elements and generating a false proposition, without ever entertaining a doubt about the existence of the fact with which we are acquainted.

On Russell's analysis, the objects of acquaintance are known by us completely and perfectly, with no further knowledge of them even theoretically possible. If we know all there is to know of *O* when we are acquainted with *O*, then surely one of the things which we know is whether doubt about *O*, such as doubt about *O*'s existence, is warranted. It is not as clear as Sainsbury suggests that Russell would deny the indubitability of "our knowledge of the existence of a fact with which we are acquainted."<sup>39</sup> There is good reason to believe that the indubitability of acquaintance follows from Russell's views about the completeness and perfection of acquaintance. Consequently, it is far from obvious that indubitability forms a dispensable part of Russell's account of acquaintance.

The indubitability of knowledge by acquaintance follows from its infallibility since we cannot doubt what cannot theoretically fail to be knowledge. The infallibility of knowledge by acquaintance follows from the completeness and perfection of the knowledge, with no further knowledge of the object known by acquaintance even theoretically possible. Given the completeness and perfection of knowledge by acquaintance, we can hardly dispense with its indubitability.

Russell himself makes the indubitability point in terms of absurdities. He states that "it is possible, without absurdity, to doubt whether there is a table at all, whereas it is not possible to doubt the sense-data."<sup>40</sup> The clear suggestion here is that any doubt about the reality and existence of sense-data with which we are acquainted would be absurd. Where the object of acquaintance is real but does not actually exist, such as in the case of acquaintance with universal properties and relations, any doubt about the reality, but not the existence, of the universals with which we are acquainted would similarly be absurd.

#### 10.5 Russell's Notion of Learning to be Acquainted

Russell's paradigm case of knowledge of a universal property or relation involves abstracting the universal from a collection of items by recognizing something which those items share in common. Russell explains that, "When we see a white patch, we are acquainted, in the first instance, with the particular patch; but by seeing many white patches, we easily learn to abstract the whiteness which they all have in common, and in learning to do this we are learning to be acquainted with whiteness."<sup>41</sup> Russell's talk of "learning to be acquainted with whiteness" is confusing since he has led us to believe that we either are or are not acquainted with something, and that it is not a matter of degree. This was surely part of the point of the completeness and perfection of acquaintance. If we must "learn to be acquainted with whiteness," then it is clear that we did not learn everything there is to learn of whiteness when we were first presented with it. Any knowledge which can stand improvement through further learning is clearly not a form of knowledge which is complete, perfect and infallible, with no further knowledge even theoretically possible.

But it is important not to overlook Russell's notion of learning to be acquainted. Russell seems to be saying that, although we achieve full acquaintance with individual particulars which exemplify the universal property of whiteness whenever we are acquainted with white sense-data, we do not yet achieve full acquaintance with all of their relations to other particulars with which we are acquainted. Only by recognizing that several of the particulars with which we are acquainted share the common universal property of whiteness do we become fully acquainted with this objective relation that obtains between these particulars. Only by learning to recognize this objective relation between these particulars are we able to learn to be acquainted with the universal property of whiteness.

Alan R. White maintains that Russell "took 'acquaintance' to signify an occurrence, a momentary present contact, whereas ordinary 'acquaintance' is used dispositionally."<sup>42</sup> Romane Clark similarly insists that "an act of acquaintance just is a single occurrent awareness."<sup>43</sup> But White's and Clark's claims conflict with Russell's account of acquaintance with universal properties and relations. When we abstract a universal from several complexes which we have noticed share a common element, thereby learning to be acquainted with the universal itself, Russell does not suggest that this acquaintance which we learn to achieve is merely an occurrence, rather than a lasting cognition or direct awareness of the universal. Russell's account of acquaintance with the universal relations of mathematics shows clearly that he did not mean to suggest that, as soon as the universal which we have abstracted is no longer "before our mind," such as when our mind wanders onto other matters, we lose our acquaintance with it, and must re-learn to be acquainted with it by re-abstracting the universal from another collection of complexes which have that universal in common.

#### 10.6 Could Self-Knowledge Ever Be Acquaintance with the Self?

Russell's answer to the question: What do we know when we know we perceive? changes over the years as he grows progressively more suspicious of knowledge of the self. In *The Problems of Philosophy*, he states that "it is probable, though not certain, that we have acquaintance with Self, as that which is aware of things or has desires towards things."<sup>44</sup> But in *Theory of Knowledge*, Russell explicitly denies that we are ever acquainted with the self. He claims that the theory of acquaintance would be false if it implied "a direct consciousness of the bare subject."<sup>45</sup> Russell concludes that "we are not acquainted with the subject,"<sup>46</sup> and that "The subject itself appears to be not acquainted with itself."<sup>47</sup> When we are aware of our experiencing of an object *O*, what we are actually aware of is the *fact* "something is acquainted with *O*."<sup>48</sup> The subject appears, not in any individual capacity, but rather "as an 'apparent variable'."<sup>49</sup> Subjects of experiences are not themselves given in acquaintance, but are instead "known merely as referents for the relation of acquaintance."<sup>50</sup>

Russell cautions that "nothing is to be assumed as to the identity of the subjects of different experiences belonging to the same person"<sup>51</sup> because it is always possible that the one self or mind which embraces both subjects is a mere construction.<sup>52</sup> Russell's account of "self-consciousness," or the "experience of a present experience," is thus *doubly ironic* since it requires neither an identity of the subjects of the two



experiences nor a consciousness or awareness of the self. Yet, how could it be *our* experiencing which we introspectively experience if it is *not* the same subject in both the introspected experience and the introspecting experience? How could the different experiences belong to the same person if the subjects of those experiences differed?

On Russell's analysis, we are not directly or immediately aware of ourselves when we are aware of seeing the sun, but are instead directly or immediately aware of a complex which is our seeing the sun. Exactly how we know that it is *our* seeing the sun which we are introspecting when we are *not* directly aware of the subject of the seeing remains a mystery. When Russell allows that "acquaintance with ourselves seems *probably* to occur," it is easier to understand how we could know it is *our* seeing that we are introspecting, and not someone else's. But when he later suggests that "we assume that we do not have acquaintance with ourselves,"<sup>53</sup> it is more difficult to see how we could possibly know that it is *our* seeing that we introspect.

Just as acquaintance with an introspected experience does not entail acquaintance with the subject of that experience, Russell believes that "acquaintance with a complex does not necessarily involve acquaintance with its relating relation."<sup>54</sup> The complex may be given to us in acquaintance *as a whole*, rather than "experienced in the analyzed form."<sup>55</sup> However, this allows for the implausible situation in which, prior to acquiring "that more abstract acquaintance" which enables us to understand the word "seeing," we introspectively experience our seeing the sun, the *fact* that we are seeing the sun, without ever being acquainted with either ourselves or the seeing. Since Russell maintains that the sun itself is a mere theoretical or logical construction, not much seems to remain as the object of introspective acquaintance when we are introspectively aware of our seeing the sun. If we introspectively experience the *fact* that we are seeing, without ever experiencing the seeing itself, then how do we know *that* it is a fact that we are seeing? How do we know *that* the fact which we introspect *is* a fact?

Russell never appreciated the difficulties in his view that "two experiences can be seen to have a certain resemblance which in fact consists in their having the same subject, even if the subject itself is not given in acquaintance. (I am not asserting that this is the case, but only that it may be.)"<sup>56</sup> He apparently reasoned that the datum of awareness in our awareness of an experience is a *fact*, and that we can see the resemblance between two facts without having to see the resemblance between the particulars about which they are facts. Just as we can be aware of the *fact* "something is

acquainted with *O*" without ever being acquainted with that something, we can be aware of the resemblance between the facts "A experiences *X*" and "A experiences *Y*" without ever being acquainted with *A*.

But how can two experiences be seen to have a certain resemblance which in fact consists in their having a common subject without our being acquainted with that in virtue of which they have that resemblance, namely, the subject of the experiences? If it is suggested that the two experiences can be seen to have the property of belonging to the same subject, the question then becomes: How can the experiences be seen to have the property of belonging to the same subject if we are never actually acquainted with that in virtue of which they have the property? How can it be seen to be a fact that the experiences have the property of belonging to the same subject? In order to know an experience has the property of being ours, we must know the experience is ours. But how do we know an experience is ours if we are never acquainted with ourselves?

Certainly, on Russell's own account of learning to be acquainted, seeing that two experiences have a certain resemblance suggests that we have abstracted, and thereby learned to be acquainted with, that in virtue of which they have this resemblance. If the resemblance in fact consists in the experiences having the same subject, then seeing that the experiences have a certain resemblance suggests that we have successfully abstracted, and thus learned to be acquainted with, the common subject of those experiences. It might be suggested that we merely abstract the *fact* that the experiences share a common subject, that we abstract their sharing a common subject, without ever having to abstract a common subject. But since sharing a common subject is a property of two or more experiences, rather than a property possessed by individual experiences, it is not a property which two experiences can have in common, and so cannot be abstracted from the experiences. The fact that two experiences share a common subject does not entail that they share the having of a common subject.

At the very least, Russell grossly underrepresented our self-awareness or self-consciousness when he insisted that "the datum when we are aware of experiencing an object *O* is the fact 'something is acquainted with *O*'."<sup>57</sup> When we are aware of our seeing the sun, and thus, on Russell's analysis, acquainted with our acquaintance with a sense-datum representing the sun, we are directly aware, not just that *something* sees the sun, but also that *we* see the sun. We are immediately aware, not just of *a* seeing of the sun, but also of *our* seeing of the sun.

## 10.7 Abstractionism and Acquaintance with the Self

While Russell is right to reject the assumption "that we are ever acquainted with the bare subject of an acquaintance,"<sup>58</sup> it remains unclear how "two instances of acquaintance can be given as having a common subject, even when the subject is not given."<sup>59</sup> But if we apply Russell's abstractionist reasoning about universals to the problem of acquaintance with the self, we arrive at a model of knowledge of the self which does not require acquaintance with a bare self. From acquaintance with a complex which has whiteness as a constituent, we become acquainted, through abstraction, with the universal property of whiteness itself. We are never actually acquainted with the universal property of whiteness on its own, as a bare universal.

Why not apply the same sort of analysis to the problem of acquaintance with the self? Why not suppose that, in the first instance, we are introspectively acquainted only with mental complexes of which we are a constituent, but after several such introspections, we learn to abstract the common element from those complexes, and thereby learn to be acquainted with ourselves? In this way, we avoid having to say that we have merely descriptive, and thus fallible, knowledge of ourselves. We also manage to avoid the Humean difficulty of having to say that we become acquainted with ourselves by catching a glimpse of ourselves as a naked or bare particular, outside of all mental complexes. We become directly acquainted with ourselves through being acquainted with complexes of which we are a constituent, and recognizing that we are the common element in all of those complexes. What we recognize as being common to those complexes *just is* ourselves, and not that they all have the property of being ours.

Russell's analysis of acquaintance with universals, involving the notion of learning to be acquainted, thus serves as a possible model for acquaintance with ourselves. This model takes account of the Humean objection that, whenever we look inside ourselves, we never can see a bare self, but instead see certain thoughts and experiences. The merit of this model is that it stops short of denying, as both Hume and Russell felt compelled to deny, that we are ever directly acquainted with the self. As a result, it provides a more plausible answer to the questions: How do we know our experiences are ours? and What do we know when we know we perceive?

Just as we can learn, through the process of abstraction, to be introspectively acquainted with the universals which are instantiated in our mental complexes, we can

learn to be introspectively acquainted with ourselves through the process of abstracting the common element from our mental complexes. Our acquaintance, in the first instance, is with mental complexes of which we are constituents. But by introspecting several of these complexes, we learn to abstract their common element, and to obtain self-awareness.

We can agree with Russell when he remarks that "it is hard to discover any state of mind in which I am aware of myself alone, as opposed to a complex of which I am a constituent."<sup>60</sup> On the proposed account of self-knowledge through introspective acquaintance, we are not aware of, or acquainted with, the self alone, a bare particular wholly outside of any complex whatsoever. But this does not mean that we are never actually acquainted with the self. As Roderick Chisholm rightly points out: "from the fact that there is no 'direct consciousness of a bare subject' we must not draw the erroneous conclusion that no one is ever directly acquainted with himself."<sup>61</sup> Instead, we learn to be acquainted with the self through being acquainted in introspection with mental complexes which have the self as a constituent.

We recognize that the introspected self is one and the same self as the introspecting self since, in learning to be acquainted with the introspected self, we acquire complete, perfect and infallible knowledge of that self. If our knowledge of the introspected self is so complete and perfect that no further knowledge of it is even theoretically possible, then we will surely know, among other things, whether we are warranted in doubting whether the introspected self is one and the same self as the introspecting self.

Russell hints at the immunity from error in self-reference when, in commenting on cases of acquaintance in which what we are acquainted with is itself an acquaintance with an object, such as when "I am acquainted with my acquaintance with the sense-datum representing the sun,"<sup>62</sup> he claims that "it is plain that the person acquainted is myself."<sup>63</sup> It is difficult to see how the fact that it is one's *own* self who is acquainted with the sense-datum can be so plain unless it were supposed that the self involved in the complex were *itself* an object of acquaintance.

Surely the most plausible answer to the question: What do we know when we know we perceive? is in terms of acquaintance with the perceiving self. Through introspection, we are able to recognize the common element in our mental states, including our perceptions, and to abstract this common element from these mental

complexes. By abstracting this common element, or self, we learn to be acquainted with the self. Since Russellian acquaintance gives complete and perfect knowledge of its objects, with no further knowledge even theoretically possible, we also acquire infallible and indubitable knowledge of the identity of the abstracted self. For among the things which we must surely learn when we learn to be acquainted with the abstracted self is whether we are warranted in doubting whether the abstracted self is one and the same self as the abstracting self. We do not catch glimpses of bare selves, but instead abstract ourselves from our various mental states. It is only by abstracting ourselves from our mental complexes that we are able to learn to be acquainted with ourselves.



- 1 Bertrand Russell, *Theory of Knowledge*, edited by Elizabeth Ramsden Eames in collaboration with Kenneth Blackwell, London: George Allen & Unwin Ltd., 1984, p. 36.
- 2 Colin McGinn, *The Character of Mind*, Oxford: Oxford University Press, 1982, p. 52.
- 3 Michael E. Levin, "Phenomenal Properties," *Philosophy and Phenomenological Research* 42 (1981-82), p. 55.
- 4 Bertrand Russell, *The Problems of Philosophy*, Oxford: Oxford University Press, 1983, p. 28.
- 5 *Ibid.*, pp. 97-98.
- 6 Russell, *Theory of Knowledge*, p. 32.
- 7 Bertrand Russell, "Knowledge By Acquaintance and Knowledge By Description," in *Mysticism and Logic*, Harmondsworth: Penguin Books Ltd., 1954, p. 201.
- 8 Russell, *Theory of Knowledge*, p. 44.
- 9 *Ibid.*, p. 43.
- 10 *Ibid.*, p. 38.
- 11 *Ibid.*, p. 35.
- 12 *Ibid.*
- 13 *Ibid.*, p. 99.
- 14 Christopher Peacocke, *Sense and Content: Experience, Thought, and their Relations*, Oxford: Oxford University Press, 1983, p. 182.
- 15 *Ibid.*
- 16 *Ibid.*
- 17 Russell, *The Problems of Philosophy*, p. 25.
- 18 Peacocke, *Sense and Content: Experience, Thought, and their Relations*, p. 184.
- 19 Russell, *Theory of Knowledge*, p. 29.
- 20 *Ibid.*, p. 43.
- 21 *Ibid.*

- 22 Peacocke, *Sense and Content: Experience, Thought, and their Relations*, p. 183.
- 23 Mark Sainsbury, "Russell on Acquaintance," in *Philosophers Ancient and Modern*, Godfrey Vesey (ed.), Cambridge: Cambridge University Press, 1987, p. 224.
- 24 *Ibid.*, p. 219.
- 25 David Woodruff Smith, "The Realism in Perception," *Noûs* 16 (1982), p. 44.
- 26 *Ibid.*
- 27 *Ibid.*, p. 43.
- 28 Russell, *Theory of Knowledge*, p. 53.
- 29 Smith, "The Realism in Perception," p. 43.
- 30 *Ibid.*, pp. 43-44.
- 31 *Ibid.*, p. 44.
- 32 Russell, *Theory of Knowledge*, p. 48.
- 33 W.V. Quine, "Russell's Ontological Development," in *Bertrand Russell*, D.F. Pears (ed.), New York: Doubleday & Company, Inc., 1972, p. 291.
- 34 R.J. Hirst, *The Problems of Perception*, New York: Humanities Press Inc., 1978, p. 30.
- 35 Peacocke, *Sense and Content: Experience, Thought, and their Relations*, p. 199.
- 36 A.J. Ayer, "An Appraisal of Bertrand Russell's Philosophy," in *Bertrand Russell*, D.F. Pears (ed.), New York: Doubleday & Company, Inc., 1972, p. 14.
- 37 *Ibid.*
- 38 Sainsbury, "Russell on Acquaintance," p. 221.
- 39 *Ibid.*, p. 222.
- 40 Russell, *The Problems of Philosophy*, p. 26.
- 41 *Ibid.*, p. 58.
- 42 Alan R. White, "Knowledge, Acquaintance, and Awareness," in *The Foundations of Analytic Philosophy*, Midwest Studies in Philosophy, volume 6, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1981, p. 160.
- 43 Romane Clark, "Acquaintance," *Synthese* 46 (1981), pp. 232-3.

- 44 Russell, *The Problems of Philosophy*, p. 28.
- 45 Russell, *Theory of Knowledge*, p. 37.
- 46 *Ibid.*, p. 40.
- 47 *Ibid.*, p. 44.
- 48 *Ibid.*, p. 37.
- 49 *Ibid.*
- 50 *Ibid.*
- 51 *Ibid.*, p. 35.
- 52 *Ibid.*, pp. 38-9.
- 53 Russell, "Knowledge By Acquaintance and Knowledge By Description," p. 199.
- 54 Russell, *Theory of Knowledge*, p. 82.
- 55 *Ibid.*
- 56 *Ibid.*, p. 83.
- 57 *Ibid.*, p. 37.
- 58 *Ibid.*
- 59 *Ibid.*
- 60 Russell, "Knowledge By Acquaintance and Knowledge By Description," p. 199.
- 61 Roderick Chisholm, "On the Nature of Acquaintance: A Discussion of Russell's Theory of Knowledge," in *Bertrand Russell's Philosophy*, George Nakhnikian (ed.), London: Gerald Duckworth and Co. Ltd., 1974, p. 52.
- 62 Russell, *The Problems of Philosophy*, p. 27.
- 63 *Ibid.*, pp. 27-8.

## Conclusion

It may be helpful to recall the course of the argument of the dissertation in order to place its contributions in their proper context. Chapters one through five discussed traditional formal objections to the direct realist's notion of a direct contact with external physical reality, and outlined a common-sense realist response to the arguments. In my common-sense analysis, I attempted to address the argument from hallucination, the argument from perceptual relativity, the argument from illusion, the argument from time-lags and the argument from the causal processes involved in perceiving. Since the argument from causal processes is widely regarded as the most formidable challenge facing direct realism, I devoted chapters two and three to its examination and rebuttal.

In chapter two, "Representationalism and the Common Element Thesis," I attempted to show that the causal theorist's common element thesis committed the causal theorist to giving hallucinations and genuine perceptions the very same analysis with respect to experiential content and objects. If hallucination and genuine perception are type-identical experiences, then they would both have wholly internally generated content or objects, and direct realism's notion of a direct contact with external physical reality would be false. I maintained that the traditional disjunctivist's response to the causal argument against direct realism is implausible since it holds that one and the same proximate neural cause can produce either an experience with wholly internally generated content or objects, or an experience with external physical existents, depending upon the way that the proximate neural cause is itself brought about. Traditional disjunctivists about experience implausibly deny the principle "Same proximate cause, same immediate effect."

I proposed a modified disjunctivism about experience, one which holds that hallucinations and genuine perceptions are type-distinct experiences, but which does not deny the intuitively plausible principle "Same proximate cause, same immediate effect." Like causal theorists, traditional disjunctivists accepted the notion that hallucinations and genuine perceptions had the same proximate cause in the brain. They were then compelled to maintain that one and the same proximate neural cause could have different immediate effects. Until recently, the bulk of experimental research on mental imagery, such as the data from mental rotation and scanning experiments, suggested that hallucinations and genuine perceptions had the same proximate neural cause. But recent experimental findings, discussed in the latter part of chapter three, "Why the Common Element Thesis Is False," show that hallucination and genuine perception

involve altogether different brain processes and activity, and thus altogether different proximate neural causes. So the common element theorist's notion that hallucinations and genuine perceptions are type-identical experiences is false, and hallucinations and genuine perceptions do not require the same analysis for their content or objects, despite being subjectively indistinguishable.

In chapter four, "Are Hirst, Armstrong and Searle Representationalists?" I proposed a broader interpretation of representationalism, one which is identified by reference to a bifurcation or duplication of phenomenal reality, rather than a bifurcation or duplication of the relation of perceptual awareness and its objects. I argued that a theory of perception was representationalist, not simply when it maintained that we perceive one thing in virtue of perceiving another, but when it denied that external physical objects like tomatoes were visibly red or round. I then applied the broader interpretation of representationalism to the theories of perception offered by Hirst, Armstrong and Searle. I concluded that, while their theories were not representationalist *narrowly construed* in terms of perceiving one thing in virtue of perceiving another, their theories were representationalist *broadly construed* in terms of a bifurcation or duplication of phenomenal reality.

In chapter five, "Intrinsic Looks, Time-Lags, and Strong Externalism," I proposed a modified selective theory of perceptual content, one which does not implausibly require that we select from incompatible intrinsic properties of external physical objects. Traditional versions of the direct realist's selective theory of perceptual content account for perceptual relativity in terms of a selection from incompatible intrinsic shapes or colours of physical objects. But a physical object cannot be both intrinsically round and intrinsically elliptical. However, a physical object can be both intrinsically round looking and intrinsically elliptical looking. The intrinsic look of a physical object is the look it has to certain perspectives in space. The proposed modified selective theory of perceptual content holds that we select, not from incompatible intrinsic properties of physical objects, but rather from incompatible intrinsic looks of physical objects. Since the selective theory of perceptual content need not implausibly maintain that physical objects have incompatible intrinsic properties, we are not compelled to accept the representationalist's generative theory of perceptual content.

Also in chapter five, I argued that we can perceive spatially and temporally isolated causal descendants of external physical objects, and that these causal descendants are themselves external and public, physical existents, although not



external and public, physical objects. I applied the notion that we perceive causal descendants of physical objects to the bent-stick and time-lag illusions, maintaining that we perceive causal descendants of the bent stick or distant stars, rather than the bent stick or distant stars themselves. An account of the bent-stick and time-lag illusions in terms of the perception of causal descendants of physical objects allows us to avoid having to say that we directly perceive things in our own minds, or, in the time-lag argument, past events. An explanation in terms of causal descendants of physical objects enables us to preserve the direct realist's publicity assumption in perception, the assumption that we perceive external and public, physical reality.

In the latter part of chapter five, I applied the notion that we can perceive causal descendants of external physical objects to McGinn's Twin Earth-inspired argument against strong externalism about perceptual content. I maintained that McGinn's argument does not show that perceptual content is not determined by items in the Twin Earth percipient's physical environment since his perceptual content as of square objects is determined by square shaped light arrays from distal round objects, and square shaped light arrays just are items in the percipient's physical environment. So McGinn's Twin Earth-inspired argument does not succeed in showing that perceptual content is not individuation-dependent on causal/contextual relations to the physical environment, and the strong externalism of the modified disjunctivism about experience which I proposed in chapter two has not been refuted.

Having addressed various arguments against direct realism and its notion of a direct contact with external physical reality, chapters six through ten attempted a positive characterization of perceptual experience. A common-sense analysis of perception was offered, but not a theory of common-sense realism *per se*. The analysis of perceptual experience which emerged was non-epistemic, non-intentional and non-propositional.

In chapter six, "The Conditions of Perception," I identified some necessary conditions of perceiving. I argued that seeing requires more than simply setting one's properly functioning eyes on something while being conscious. Seeing requires, in addition, that the percipient have a visual experience of the object, analysed in terms of the object making a difference to the percipient's visual experience such that he would notice its sudden absence. I also argued that perception requires a genuine connection between the objects perceived and the percipient. Since evidence of masking is evidence of a genuine connection, a necessary condition of perceiving is that the percipient's experiences be subject to masking with respect to the objects of perception.

In the latter part of chapter six, I maintained that genuinely perceptual experiences could be *facilitated* by prosthetic sense organs provided that the artificial organs functioned like their biological counterparts, transducing the visual and aural stimulus arrays from external physical objects into appropriate electrical activity in the brain. A necessary condition of perceiving is that the object perceived must have an appropriate causal impact on the percipient's sense organs or their functional equivalents.

In chapter seven, "Why Perceptual Experience Is Not Essentially Epistemic," I argued that the notion that all perceiving is perceiving *as*, and that perceptual experiences minimally involve would-be judgments or beliefs, is epistemic since it entails actual judgments or beliefs which hold the would-be judgments or beliefs in check, preventing them from becoming full-blown judgments or beliefs. Inhibited judgments or beliefs entail actual judgments or beliefs which inhibit them. Through a series of examples, I argued that there are perceptual experiences involving neither actual nor would-be judgment or belief looks of objects to percipients, and in the process defended a strongly non-epistemic analysis of perception. Since objects of perception need not have epistemic looks to percipients, and thus need not be perceived *as* such and such, perceiving need not be a matter of perceiving *as being*. I pointed out that both the epistemic look of objects to percipients and the propositional representational content of perceptual experiences are identified by reference to would-be judgments, that is, to judgments which are held in check by other, contrary judgments.

In chapter eight, "Why Perceptual Experience Is Not Intrinsically Intentional," I attempted to show that the intentional, propositional representational content of perceptual experiences amounts to their representing things *as being* the case. Since perceptual experiences do not essentially involve perceiving *as being*, they do not essentially have intentional, propositional representational content. The conclusion in chapter seven, that objects can look a certain way to a percipient without looking *as being* a certain way, and thus without having an epistemic look to a percipient, leads naturally to the argument in chapter eight, that perceptual experiences do not essentially have intentional, propositional representational properties. Since perceptual experiences need not represent their objects *as being* such and such, perceptual experiences need not have propositional representational content.

The conclusion in chapter eight, that perceptual experiences do not essentially have intentional, propositional representational content, leads in turn to the argument in chapter nine, "The Qualia of Perceptual Experience," that perceptual experiences

essentially have phenomenal or qualitative content, a way that it is like for the percipient to perceive. Through another series of examples, I attempted to show that perceptual experiences have intrinsic, phenomenal or qualitative properties, or qualia of experience, which are not reducible to propositional representational properties of perceptual experience. What it is like for the percipient to perceive cannot be reduced to what the percipient would judge or believe in the absence of judgments or beliefs to the contrary.

In chapter ten, "Acquaintance, Physical Objects, and Knowledge of the Self," I argued against recent attempts to apply Russellian acquaintance to the direct perception of external physical objects. I maintained that such attempts neglect central elements in Russell's notion of acquaintance, namely, that the objects of acquaintance be known perfectly and completely, with no further knowledge of the objects even theoretically possible. I argued that the causal and perspectival nature of perception precluded the application of Russellian acquaintance to the direct perception of external physical objects. In the course of my discussion of Russellian acquaintance, I attempted to show how Russell's largely neglected notion of learning to be acquainted with an object could account for knowledge of the self, and thus explain how we could know we perceive, without entailing acquaintance with a bare self, wholly outside of any mental complex. I proposed an abstractionist account of acquaintance with the self, in which we abstract ourselves from mental complexes of which we are a constituent.

## Bibliography

Aaron, Richard I., "The Common Sense View of Sense-Perception," *Proceedings of the Aristotelian Society* 58 (1957-58): 1-14.

Acock, Malcolm and Howard Jackson, "Seeing and Acquiring Beliefs," *Mind* 88 (1979): 370-83.

Alexander, Peter, "Inferences About Seeing," in *Knowledge and Necessity*, Royal Institute of Philosophy Lectures, volume 3, 1968-69, foreword by G.N.A. Vesey, London: Macmillan and Co. Ltd., 1970: 73-90.

Alston, William P., "Varieties of Privileged Access," *American Philosophical Quarterly* 8 (1971): 223-41.

-----"What's Wrong with Immediate Knowledge?" *Synthese* 55 (1983): 73-95.

Anderson, John R., "Arguments Concerning Representations for Mental Imagery," *Psychological Review* 85 (1978): 249-77.

Anscombe, G.E.M., "The Intentionality of Sensation: A Grammatical Feature," in *Analytical Philosophy*, second series, R.J. Butler (ed.), Oxford: Basil Blackwell & Mott Ltd., 1965: 158-80.

-----"Comment on Professor R.L. Gregory's Paper," in *Philosophy of Psychology*, S.C. Brown (ed.), London: The Macmillan Press Ltd., 1974: 211-20.

Aquila, Richard E., book review of John R. Searle's *Intentionality: An Essay In the Philosophy of Mind*, *Philosophy and Phenomenological Research* 46 (1985-86): 159-70.

Armstrong, D.M., "Illusions of Sense," *Australasian Journal of Philosophy* 33 (1955): 88-106.

-----"Mr. Arthadeva and Naive Realism," *Australasian Journal of Philosophy* 37 (1959): 67-70.

-----*Perception and the Physical World*, London: Routledge & Kegan Paul Ltd., 1961.

-----"Is Introspective Knowledge Incorrigible?," *Philosophical Review* 72 (1963): 417-32.

-----"Max Deutscher and Perception," *Australasian Journal of Philosophy* 41 (1963): 246-9.

-----"A Theory of Perception," in *Scientific Psychology: Principles and Approaches*, Benjamin B. Wolman (ed.), New York: Basic Books, Inc., 1965: 489-505.

-----*A Materialist Theory of the Mind*, London: Routledge & Kegan Paul Ltd., 1971.

-----"Perception, Sense Data and Causality," in *Perception and Identity*, G.F. Macdonald (ed.), Ithaca: Cornell University Press, 1979: 84-98.

-----"The Nature of Mind," "The Causal Theory of the Mind," "Epistemological Foundations for a Materialist Theory of the Mind," "What is Consciousness?" "Colour Realism and the Argument from Microscopes" and "Immediate Perception," in *The Nature of Mind and Other Essays*, Ithaca: Cornell University Press, 1981: 1-15; 16-31; 32-54; 55-67; 104-18; and 119-31.

-----"Intentionality, Perception, and Causality: Reflections on John Searle's *Intentionality*," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993: 149-58.

Arthadeva, M., "Naive Realism and Illusions of Reflection," *Australasian Journal of Philosophy* 35 (1957): 155-69.

-----"Naive Realism and Illusions of Refraction," *Australasian Journal of Philosophy* 37 (1959): 118-37.

-----"Mirror Images' are Physical Objects: A Reply to Mr. Armstrong," *Australasian Journal of Philosophy* 38 (1960): 160-2.

Austin, J.L., *Sense and Sensibilia*, reconstructed from the manuscript notes by G.J. Warnock, Oxford: Oxford University Press, 1979.

Ayer, A.J., *The Problem of Knowledge*, London: Macmillan and Co. Ltd., 1958.

-----"Has Austin Refuted the Sense-Datum Theory?" *Synthese* 17 (1967): 117-40.

-----"An Appraisal of Bertrand Russell's Philosophy," in *Bertrand Russell*, D.F. Pears (ed.), New York: Doubleday & Company, Inc., 1972: 6-22.

-----"The Causal Theory of Perception," *Proceedings of the Aristotelian Society*, supplementary volume 51 (1977): 105-25.

-----replies to papers on perception in *Perception and Identity*, G.F. Macdonald (ed.), Ithaca: Cornell University Press, 1979: 277-98.

-----*The Central Questions of Philosophy*, London: Penguin Books Ltd., 1990.

-----*Philosophy in the Twentieth Century*, London: Unwin Paperbacks, 1990.

Bach, Kent, "Burge's New Thought Experiment: Back to the Drawing Room," *Journal of Philosophy* 85 (1988): 88-97.

Baker, Lynne Rudder, "On a Causal Theory of Content," in *Philosophy of Mind and Action Theory, Philosophical Perspectives*, volume 3, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1989: 165-86.

----- "Has Content Been Naturalized?" in *Meaning In Mind: Fodor and His Critics*, Barry Loewer and Georges Rey (eds.), Oxford: Blackwell Publishers, 1993: 17-32.

Baker, Robin R., "A Sense of Magnetism," *New Scientist* 87 (1980): 844-6.



Baldwin, Thomas, "The Projective Theory of Sensory Content," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 177-95.

Balfour, Arthur James, *Theism and Thought: A Study in Familiar Beliefs*, London: Hodder and Stoughton Ltd., 1924.

Barber, Theodore Xenophon, "Imagery and 'Hallucinations': Effects of LSD Contrasted with the Effects of 'Hypnotic' Suggestions," in *Imagery: Current Cognitive Approaches*, Sydney Joelson Segal (ed.), New York: Academic Press, Inc., 1971: 101-29.

Barnes, Winston H.F., "The Myth of Sense-Data," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965: 138-67.

Baylis, Charles A., "Professor Chisholm on Perceiving," *Journal of Philosophy* 56 (1959): 773-91.

-----"Foundations for a Presentative Theory of Perception and Sensation," *Proceedings of the Aristotelian Society* 66 (1965-66): 41-54.

Bigelow, John, John Collins and Robert Pargetter, "Colouring in the World," *Mind* 99 (1990): 279-88.

Bilgrami, Akeel, "Realism Without Internalism: A Critique of Searle on Intentionality," *Journal of Philosophy* 86 (1989): 57-72.

Birchall, B.C., "The Intentional Project," *Philosophy and Phenomenological Research* 42 (1981-82): 147-59.

Blakeslee, Sandra, "Seeing and Imagining: Clues to the Workings of the Mind's Eye," *The New York Times*, Tuesday, August 31, 1993.

Block, Ned, "Are Absent Qualia Impossible?" *Philosophical Review* 89 (1980): 257-74.

-----"Introduction: What is Functionalism?" and "Troubles with Functionalism," in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980: 171-84 and 268-305.

-----"Introduction: What is the Issue?" in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 1-18.

-----"The Photographic Fallacy in the Debate about Mental Imagery," *Noûs* 17 (1983): 651-61.

-----"Inverted Earth," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990: 53-79.

-----"Mental Pictures and Cognitive Science," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 577-607.

Block, Ned and Jerry A. Fodor, "What Psychological States are Not," in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980: 237-50.

Blumenfeld, Jean Beer, "Phenomenal Properties and the Identity Theory," *Australasian Journal of Philosophy* 57 (1979): 309-23.

Bogdan, Radu J., "Mind, Content and Information," *Synthese* 70 (1987): 205-27.

Borst, C.V., "Perception and Intentionality," *Mind* 79 (1970): 115-121.

Bradie, Michael P., "The Causal Theory of Perception," *Synthese* 33 (1976): 41-74.

Bringsjord, Selmer, "Tracing Superman Again: A Reply to Clark," *Analysis* 48 (1988): 52-4.

Broad, C.D., *Scientific Thought*, Paterson: Littlefield, Adams & Co., 1959.

-----"Some Elementary Reflections on Sense-Perception" and "The Theory of Sensa," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965: 29-48 and 85-129.

Brown, Harold, "Perception and Meaning," *American Philosophical Quarterly*, monograph series number 6 (1972): 1-9.

Brown, Norman, "Sense-Data and Material Objects," *Mind* 66 (1957): 173-94.

Brown, Roger and Richard J. Herrnstein, "Icons and Images," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 19-49.

Brueckner, Anthony, "Scepticism about Knowledge of Content," *Mind* 99 (1990): 447-51.

Budd, Malcolm, *Wittgenstein's Philosophy of Psychology*, London: Routledge, 1991.

Burge, Tyler, "Individualism and the Mental," in *Studies in Metaphysics, Midwest Studies in Philosophy*, volume 4, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1979: 73-121.

-----"Other Bodies," in *Thought and Object: Essays on Intentionality*, Andrew Woodfield (ed.), Oxford: Oxford University Press, 1982: 97-120.

-----"Two Thought Experiments Reviewed," *Notre Dame Journal of Formal Logic* 23 (1982): 284-93.

-----"Cartesian Error and the Objectivity of Perception," in *Subject, Thought, and Context*, John McDowell and Philip Pettit (eds.), Oxford: Oxford University Press, 1986: 117-36.

-----"Individualism and Psychology," *Philosophical Review* 95 (1986): 3-45.

- "Individualism and Self-Knowledge," *Journal of Philosophy* 85 (1988): 649-63.
- "Vision and Intentional Content," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993: 195-213.
- Butterfield, J., "Seeing the Present," *Mind* 93 (1984): 161-76.
- Campbell, John, review of Christopher Peacocke's *Sense and Content: Experience, Thought and Their Relations*, *Philosophical Quarterly* 36 (1986): 278-91.
- Campbell, Keith, "Direct Realism and Perceptual Error," in *The Business of Reason*, J.J. MacIntosh and S.C. Coval (eds.), London: Routledge & Kegan Paul Ltd., 1969: 26-38.
- "Philosophy and Common Sense," *Philosophy* 63 (1988): 161-74.
- "The Implications of Land's Theory of Color Vision," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 567-76.
- Carrier, L.S., "Immediate and Mediate Perception," *Journal of Philosophy* 66 (1969): 391-403.
- "The Time-Gap Argument," *Australasian Journal of Philosophy* 47 (1969): 263-72.
- Carruthers, Peter, "Brute Experience," *Journal of Philosophy* 86 (1989): 258-69.
- Casullo, Albert, "Phenomenal Properties," *Australasian Journal of Philosophy* 60 (1982): 167-9.
- "Adverbial Theories of Sensing and the Many-Property Problem," *Philosophical Studies* 44 (1983): 143-60.
- Chambers, Deborah and Daniel Reisberg, "Can Mental Images Be Ambiguous?" *Journal of Experimental Psychology: Human Perception and Performance* 11 (1985): 317-28.
- Charlesworth, Maurice, "Sense-impressions: A New Model," *Mind* 88 (1979): 24-44.
- Child, William, "Vision and Experience: The Causal Theory and the Disjunctive Conception," *Philosophical Quarterly* 42 (1992): 297-316.
- Chisholm, Roderick M., "The Problem of the Speckled Hen," *Mind* 51 (1942): 368-73.
- Perceiving: A Philosophical Study*, Ithaca: Cornell University Press, 1957.
- "The Theory of Appearing," in *Philosophical Analysis: A Collection of Essays*, Max Black (ed.), Englewood Cliffs: Prentice-Hall, Inc., 1963: 97-112.
- Theory of Knowledge*, Englewood Cliffs: Prentice-Hall, Inc., 1966.
- "On the Observability of the Self," *Philosophy and Phenomenological Research* 30 (1969-70): 7-21.

-----"On the Nature of Acquaintance: A Discussion of Russell's Theory of Knowledge," in *Bertrand Russell's Philosophy*, George Nakhnikian (ed.), London: Gerald Duckworth and Co. Ltd., 1974: 47-56.

-----"Converse Intentional Properties," *Journal of Philosophy* 79 (1982): 537-45.

-----"The Evidence of the Senses," in *Epistemology, Philosophical Perspectives*, volume 2, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1988: 71-90.

Churchland, Patricia Smith and Terrence J. Sejnowski, "Neural Representation and Neural Computation," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 224-52.

Churchland, Paul M., "Reduction, Qualia, and the Direct Introspection of Brain States," *Journal of Philosophy* 82 (1985): 8-28.

Clark, Andy, "Superman, The Image," *Analysis* 46 (1986): 222-4.

-----"Superman and the Duck/Rabbit: A Reply to Gordon and Bringsjord," *Analysis* 48 (1988): 54-7.

Clark, Romane, "Old Foundations For A Logic of Perception," *Synthese* 33 (1976): 75-99.

-----"Acquaintance," *Synthese* 46 (1981): 231-46.

-----"Objects of Consciousness: The Non-Relational Theory of Sensing," in *Metaphysics, Philosophical Perspectives*, volume 1, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1987: 481-500.

Close, Daryl, "What Is Non-Epistemic Seeing?" *Mind* 85 (1976): 161-70.

-----"More on Non-Epistemic Seeing," *Mind* 89 (1980): 99-105.

Coburn, Robert C., "Intentionality and Perception," *Mind* 86 (1977): 1-18.

Cohen, L.J., "The Causal Theory of Perception," *Proceedings of the Aristotelian Society*, supplementary volume 51 (1977): 127-41.

Collins, Arthur W., "The Epistemological Status of the Concept of Perception," *Philosophical Review* 76 (1968): 436-59.

-----"Could Our Beliefs Be Representations In Our Brains?" *Journal of Philosophy* 76 (1979): 225-43.

-----*The Nature of Mental Things*, Notre Dame: University of Notre Dame Press, 1987.

Coltheart, Max, "Iconic Memory: A Reply to Professor Holding," *Memory and Cognition* 3 (1975): 42-8.

Cornman, James W., "Intentionality and Intensionality," *Philosophical Quarterly* 12 (1962): 44-52.

-----"On Direct Perception," *Review of Metaphysics* 26 (1972-73): 38-56.

-----*Perception, Common Sense, and Science*, New Haven: Yale University Press, 1975.

Cousin, D.R., "Naïve Realism," *Proceedings of the Aristotelian Society* 55 (1954-55): 179-200.

Cox, J.W. Roxbee, "Are Perceptible Qualities 'In' Things?" *Analysis* 23 (1962-63): 97-103.

-----"An Analysis of Perceiving in Terms of the Causation of Beliefs I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 23-64.

-----"Eliminative Materialism and the Propositional Attitudes," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 206-23.

Crane, Tim, "Introduction," and "The Nonconceptual Content of Experience," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 1-17 and 136-57.

Crawford, Dan D., "Are There Mental Inferences in Direct Perceptions?" *American Philosophical Quarterly* 19 (1982): 83-91.

Daniels, Charles B., "Seeing Through a Time-Gap," *Australasian Journal of Philosophy* 48 (1970): 354-9.

Davidson, Donald, "Reply to Burge," *Journal of Philosophy* 85 (1988): 664-5.

Davies, Martin, "Function in Perception," *Australasian Journal of Philosophy* 61 (1983): 409-26.

-----"Individualism and Perceptual Content," *Mind* 100 (1991): 461-84.

-----"Perceptual Content and Local Supervenience," *Proceedings of the Aristotelian Society* 92 (1992): 21-45.

Davis, Lawrence H., "Functionalism and Absent Qualia," *Philosophical Studies* 41 (1982): 231-49.

Dennett, Daniel C., "A Cure for the Common Code?" in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 64-77.

-----"The Nature of Images and the Introspective Trap," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 128-34.



-----"Two Approaches to Mental Images," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 87-107.

-----"Quining Qualia," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 519-47.

Deutscher, Max, "David Armstrong and Perception," *Australasian Journal of Philosophy* 41 (1963): 80-8.

Devitt, Michael, "A Narrow Representational Theory of the Mind," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 371-98.

Draper, Stephen W., "The Penrose Triangle and a Family of Related Figures," *Perception* 7 (1978): 283-96.

Dretske, Fred I., *Seeing and Knowing*, Chicago: The University of Chicago Press, 1969.

-----"Perception and Other Minds," *Noûs* 7 (1973): 34-44.

-----"Causal Theories of Reference," *Journal of Philosophy* 74 (1977): 621-5.

-----"The Intentionality of Cognitive States," in *Studies in Epistemology, Midwest Studies in Philosophy*, volume 5, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1980: 281-94.

-----*Knowledge and the Flow of Information*, Cambridge: The M.I.T. Press, 1982.

-----"Author's Response: Why Information?" *The Behavioral and Brain Sciences* 6 (1983): 82-90.

-----"The Epistemology of Belief," *Synthese* 55 (1983): 3-19.

-----*Explaining Behavior: Reasons in a World of Causes*, Massachusetts: M.I.T. Press, 1992.

-----"Misrepresentation," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 129-43.

Dummett, Michael, "Symposium: Can an Effect Precede Its Cause?" *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954): 27-62.

-----"Bringing About the Past," *Philosophical Review* 73 (1964): 338-59.

Ebersole, Frank B., "How Philosophers See Stars," *Mind* 74 (1965): 509-29.

-----*Things We Know*, Eugene: University of Oregon Books, 1967.

Enç, Berent, "Intentional States of Mechanical Devices," *Mind* 91 (1982): 161-82.

Farah, Martha J., "Is Visual Imagery Really Visual? Overlooked Evidence from Neuropsychology," *Psychological Review* 95 (1988): 307-17.

-----"The Neural Bases of Mental Imagery," forthcoming in *The Cognitive Neurosciences*, M.J. Gazzaniga (ed.), M.I.T. Press.

Farah, Martha J., Franck Péronnet, Marie Anne Gonon and Marie Hélène Giard, "Electrophysiological Evidence for a Shared Representational Medium for Visual Images and Visual Percepts," *Journal of Experimental Psychology: General* 117 (1988): 248-57.

Farrell, B.A., "Experience," *Mind* 59 (1950): 170-98.

Field, Hartry H., "Mental Representation," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 78-114.

Finke, Ronald A., "Levels of Equivalence in Imagery and Perception," *Psychological Review* 87 (1980): 113-32.

-----"Theories Relating Mental Imagery to Perception," *Psychological Bulletin* 98 (1985): 236-59.

Firth, Roderick, "Austin and the Argument from Illusion," *Philosophical Review* 73 (1964): 372-82.

Fleming, Noel, "Recognizing and Seeing As," *Philosophical Review* 66 (1957): 161-79.

Fodor, Jerry A., "Imagistic Representation," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 135-49.

-----"Propositional Attitudes," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 45-63.

-----"Cognitive Science and the Twin-Earth Problem," *Notre Dame Journal of Formal Logic* 23 (1982): 98-118.

-----"Fodor's Guide to Mental Representation: The Intelligent Auntie's Vade-Mecum," *Mind* 94 (1985): 76-100.

-----"Why Paramecia Don't Have Mental Representations," in *Studies in the Philosophy of Mind, Midwest Studies in Philosophy*, volume 10, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1986: 3-23.

-----"Psychosemantics or: Where Do Truth Conditions Come From?" in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 312-37.

Fodor, Jerry A. and Zenon W. Pylyshyn, "How Direct is Visual Perception?: Some Reflections on Gibson's 'Ecological Approach,'" *Cognition* 9 (1981): 139-96.

Foley, Richard, "Dretske's 'Information-Theoretic' Account of Knowledge," *Synthese* 70 (1987): 159-84.

Foster, John, A.J. Ayer, London: Routledge & Kegan Paul plc., 1985.

French, Peter A., "'Seeing' and 'Seeing That', 'Observing' and 'Observing That'," in *Studies In Epistemology*, Nicholas Rescher (ed.), *American Philosophical Quarterly*, monograph series 9 (1975): 89-97.

Fumerton, Richard, "The Internalism/Externalism Controversy," in *Epistemology, Philosophical Perspectives*, volume 2, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1988: 443-59.

Georgalis, Nicholas, "No Access for the Externalist: Discussion of Heil's 'Privileged Access'," *Mind* 99 (1990): 101-8.

Gibson, Quentin, "Is There a Problem about Appearances?" *Philosophical Quarterly* 16 (1966): 319-28.

Goldenberg, G. and I Podreka, M. Steiner, K. Willmes, E. Suess and L. Deecke, "Regional Cerebral Blood Flow Patterns in Visual Imagery," *Neuropsychologica* 27 (1989): 641-64.

Goldenberg, G., I. Podreka, F. Uhl, M. Steiner, K. Willmes and L. Deecke, "Cerebral Correlates of Imagining Colours, Faces and A Map--I," *Spect of Regional Cerebral Blood Flow*, *Neuropsychologica* 27 (1989): 1315-28.

Goldenberg, G. and I. Podreka, M. Steiner, P. Franzen and L. Deecke, "Contributions of Occipital and Temporal Brain Regions To Visual and Acoustic Imagery--A Spect Study," *Neuropsychologica* 29 (1991): 695-702.

Goldenberg, G. and M. Steiner, I. Podreka and L. Deecke, "Regional Cerebral Blood Flow Patterns Related To Verification of Low- and High-Imagery Sentences," *Neuropsychologica* 30 (1992): 581-6.

Goldman, Alan H., *Empirical Knowledge*, Berkeley: University of California Press, 1991.

Goldman, Alvin I., "Perceptual Objects," *Synthese* 35 (1977): 257-84.

Gordon, David, "Clark on Tracing Mental Images," *Analysis* 48 (1988): 50-1.

Gregory, R.L., *The Intelligent Eye*, New York: McGraw-Hill Book Company, 1970.

-----"Perceptions as Hypotheses," in *Philosophy of Psychology*, S.C. Brown (ed.), London: The Macmillan Press Ltd., 1974: 195-210.

-----*Eye and Brain*, London: Weidenfeld and Nicolson, 1979.

Grice, H.P., "Some Remarks About the Senses," in *Analytical Philosophy*, first series, R.J. Butler (ed.), Oxford: Basil Blackwell & Mott Ltd., 1962: 133-53.

-----"The Causal Theory of Perception," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965: 438-72.

Griffiths, A. Phillips, "Ayer on Perception," *Mind* 69 (1960): 486-98.

Haber, Ralph Norman, "Where Are the Visions in Visual Perception?" in *Imagery: Current Cognitive Approaches*, Sydney Joelson Segal (ed.), New York: Academic Press, Inc., 1971: 33-48.

Hamlyn, D.W., "The Visual Field and Perception I," *Proceedings of the Aristotelian Society*, supplementary volume 31 (1957): 107-24.

Hanson, Norwood Russell, "On Having the Same Visual Experiences," *Mind* 69 (1960): 340-50.

Hardin, C.L., "Color and Illusion," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 555-67.

Harman, Gilbert, "Is There Mental Representation?," in *Perception and Cognition: Issues in the Foundations of Psychology*, *Minnesota Studies in the Philosophy of Science*, volume 9, C. Wade Savage (ed.), Minneapolis: University of Minnesota Press, 1978: 57-64.

-----"The Intrinsic Quality of Experience," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990: 31-52.

Hebb, D.O., "Concerning Imagery," *Psychological Review* 75 (1968): 466-77.

Heil, John, "Seeing is Believing," *American Philosophical Quarterly* 19 (1982): 229-39.

-----"Privileged Access," *Mind* 97 (1988): 238-51.

-----*The Nature of True Minds*, Cambridge: Cambridge University Press, 1992.

Hill, Christopher S., *Sensations: A Defense of Type Materialism*, Cambridge: Cambridge University Press, 1991.

Hills, David, "Introduction: Mental Representations and Languages of Thought," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 11-20.

Hinckfuss, I.C., "J.M. Hinton on Visual Experiences," *Mind* 79 (1970): 278-80.

Hinton, J.M., "Visual Experiences," *Mind* 76 (1967): 217-27.

-----*Experiences: An Inquiry Into Some Ambiguities*, Oxford: Oxford University Press, 1973.

-----"Visual Experience: A Reply to I.C. Hinckfuss," *Mind* 82 (1973): 278-9.

Hirst, R.J., "Perception, Science and Common Sense," *Mind* 60 (1951): 481-505.

-----"The Difference Between Sensing and Observing I," *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954): 197-218.

-----"A Reply To Professor Mundle," *Proceedings of the Aristotelian Society* 60 (1959-60): i-vi.

-----"Scepticism and the Representative Theory," "Sense-Data and Common Sense," "Perceptual Consciousness," "Philosophical Conclusions" and "Envoi," in *Human Senses and Perception*, G.M. Wyburn (ed.), Edinburgh: Oliver and Boyd Ltd., 1964: 242-66; 267-92; 293-315; 316-35 and 336-7.

----- (ed.) *Perception and the External World*, New York: The Macmillan Company, 1965.

-----"Mind and Brain: The Identity Hypothesis," in *The Human Agent*, Royal Institute of Philosophy Lectures, volume 1, 1966-67, foreword by G.N.A. Vesey, London: Macmillan & Co. Ltd., 1968: 160-80.

-----*The Problems of Perception*, New York: Humanities Press Inc., 1978.

Holding, Dennis H., "A Rejoinder," *Memory and Cognition* 3 (1975): 49-50.

-----"Sensory Storage Reconsidered," *Memory and Cognition* 3 (1975): 31-41.

Honderich, Ted, "Seeing Qualia and Positing the World," in *A.J. Ayer: Memorial Essays*, A. Phillips Griffiths (ed.), *Royal Institute of Philosophy* supplement 30, Cambridge: Cambridge University Press, 1991: 129-51.

Horgan, Terence, "Functionalism, Qualia, and the Inverted Spectrum," *Philosophy and Phenomenological Research* 44 (1983-84): 453-70.

-----"Supervenient Qualia," *Philosophical Review* 96 (1987): 491-519.

Horgan, Terence and James Woodward, "Folk Psychology Is Here To Stay," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 399-420.

Horowitz, Amir, "Dretske on Perception," *Ratio*, new series 3 (1990): 136-41.

Hubel, D.H. and T.N. Wiesel, "Receptive Fields, Binocular Interaction and Functional Architecture in the Cat's Visual Cortex," *Journal of Physiology* 160 (1962): 106-54.

Hyman, John, "The Causal Theory of Perception," *Philosophical Quarterly* 42 (1992): 277-96.

Jackson, Frank, *Perception: A Representative Theory*, Cambridge: Cambridge University Press, 1977.

-----"Epiphenomenal Qualia," *Philosophical Quarterly* 32 (1982): 127-36.



-----"What Mary Didn't Know," *Journal of Philosophy* 83 (1986): 291-5.

Jackson, Frank and Philip Pettit, "Functionalism and Broad Content," *Mind* 97 (1988): 381-400.

Jones, O.R., "After-Images," *American Philosophical Quarterly* 9 (1972): 150-8.

Kelley, David, *The Evidence of the Senses: A Realist Theory of Perception*, Baton Rouge: Louisiana State University Press, 1986.

Kielkopf, Charles F., "The Pictures in the Head of A Man Born Blind," *Philosophy and Phenomenological Research* 28 (1967-68): 501-13.

Kim, Jaegwon, "Materialism and the Criteria of the Mental," *Synthese* 22 (1971): 323-45.

-----"Perception and Reference Without Causality," *Journal of Philosophy* 74 (1977): 606-20.

Kitcher, Patricia, "Phenomenal Qualities," *American Philosophical Quarterly* 16 (1979): 123-9.

Kneale, William, "An Analysis of Perceiving in Terms of the Causation of Beliefs II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 65-80.

Kosslyn, Stephen Michael, "Information Representation in Visual Images," *Cognitive Psychology* 7 (1975): 341-70.

-----"Can Imagery be Distinguished from other forms of Internal Representation? Evidence from Studies of Information Retrieval Times," *Memory and Cognition* 4 (1976): 291-7.

-----"The Medium and the Message in Mental Imagery: A Theory," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 207-44.

-----"Seeing and Imagining in the Cerebral Hemispheres: A Computational Approach," *Psychological Review* 94 (1987): 148-75.

Kosslyn, Stephen Michael and James R. Pomerantz, "Imagery, Propositions, and the Form of Internal Representations," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 150-69.

Kosslyn, Stephen Michael and Steven Pinker, George E. Smith and Steven P. Shwartz, "On the Demystification of Mental Imagery," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 131-50.

Laird, John, *A Study in Realism*, Cambridge: Cambridge University Press, 1920.

Leahy, Michael P.T., "Seeing and What We See," *Mind* 82 (1973): 426-32.

Le Bihan, D., R. Turner, T.A. Zeffiro, C.A. Cuenod, P. Jezard and V. Bonnerot, "Activation of Human Primary Visual Cortex During Visual Recall: A Magnetic Resonance Imaging Study," *Proceedings of the National Academy of Sciences*, 1993, in press.

Leon, Mark, "Character, Content, and the Ontology of Experience," *Australasian Journal of Philosophy* 65 (1987): 377-99.

Levin, Janet, "Could Love Be Like A Heatwave? Physicalism and the Subjective Character of Experience," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 478-90.

Levin, Michael E., "Phenomenal Properties," *Philosophy and Phenomenological Research* 42 (1981-82): 42-58.

Lewis, David, "Veridical Hallucination and Prosthetic Vision," *Australasian Journal of Philosophy* 58 (1980): 239-49.

-----"Extrinsic Properties," *Philosophical Studies* 44 (1983): 197-200.

-----"Individuation By Acquaintance and By Stipulation," *Philosophical Review* 92 (1983): 3-32.

-----"What Experience Teaches," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 499-519.

Lloyd, A.C., "The Visual Field and Perception II," *Proceedings of the Aristotelian Society*, supplementary volume 31 (1957): 125-44.

Lloyd, Dan, "Mental Representation from the Bottom Up," *Synthese* 70 (1987): 23-78.

Loar, Brian, "Phenomenal States," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990: 81-108.

Locke, Don, *Perception and Our Knowledge of the External World*, London: George Allen & Unwin Ltd., 1967.

Lockwood, Michael, *Mind, Brain and the Quantum: The Compound "I"*, Oxford: Basil Blackwell Ltd., 1991.

Loewer, Barry, "From Information to Intentionality," *Synthese* 70 (1987): 287-317.

Lowe, E.J., "Indirect Perception and Sense Data," *Philosophical Quarterly* 31 (1981): 330-42.

-----"What Do We See Directly?" *American Philosophical Quarterly* 23 (1986): 277-85.

-----"Experience and Its Objects," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 79-104.

Lurie, Yuval, "Inner States," *Mind* 88 (1979): 241-57.

Lycan, William G., "Phenomenal Objects: A Backhanded Defense," in *Metaphysics, Philosophical Perspectives*, volume 1, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1987: 513-26.

-----"What is the 'Subjectivity' of the Mental," in *Action Theory and Philosophy of Mind, Philosophical Perspectives*, volume 4, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1990: 109-30.

Malcolm, Norman, "Direct Perception," in *Knowledge and Certainty: Essays and Lectures*, Englewood Cliffs: Prentice-Hall, Inc., 1963: 73-95.

Maloney, J. Christopher, "About Being a Bat," *Australasian Journal of Philosophy* 63 (1985): 26-49.

Margolis, Joseph, "Existential Import and Perceptual Judgments," *Journal of Philosophy* 66 (1969): 403-8.

Martin, C.B. and Karl Pfeifer, "Intentionality and the Non-Psychological," *Philosophy and Phenomenological Research* 46 (1986): 531-55.

Martin, Michael, "Sight and Touch," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 196-215.

Matthen, Mohan, "Biological Functions and Perceptual Content," *Journal of Philosophy* 85 (1988): 5-27.

-----"Intensionality and Perception: A Reply to Rosenberg," *Journal of Philosophy* 86 (1989): 727-33.

Maund, J.B., "The Representative Theory of Perception," *Canadian Journal of Philosophy* 5 (1975): 41-55.

-----"Awareness of Sensory Experience," *Mind* 85 (1976): 412-6.

-----"The Non-Sensuous Epistemic Account of Perception," *American Philosophical Quarterly* 13 (1976): 57-62.

-----"The Phenomenal and Other Uses of 'Looks'," *Australasian Journal of Philosophy* 64 (1986): 170-80.

McCulloch, Gregory, "Cause in Perception: A Note on Searle's Intentionality," *Analysis* 44 (1984): 203-5.

----- "Externalism and Experience," *Analysis* 50 (1990): 244-50.

-----"The Spirit of Twin Earth," *Analysis* 52 (1992): 168-74.

McDowell, John, "Criteria, Defeasibility, and Knowledge," in *Perceptual Knowledge*, Jonathan Dancy (ed.), Oxford: Oxford University Press, 1988: 209-19.

-----"Intentionality *De Re*," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993: 215-25.

McGinn, Colin, *The Character of Mind*, Oxford: Oxford University Press, 1982.

-----"The Structure of Content," in *Thought and Object: Essays on Intentionality*, Andrew Woodfield (ed.), Oxford: Clarendon Press, 1982: 207-58.

-----*Mental Content*, Oxford: Basil Blackwell Ltd., 1991.

McKee, P.L., "Malcolm on After-Images," *Philosophical Quarterly* 24 (1974): 132-9.

Mellor, D.H., "Nothing Like Experience," *Proceedings of the Aristotelian Society*, new series 93 (1993): 1-16.

Millar, Alan, "Veridicality: More on Searle," *Analysis* 45 (1985): 120-4.

-----"What's in a Look?" *Proceedings of the Aristotelian Society*, new series 86 (1985-86): 83-97.

-----"Experience and the Justification of Belief," *Ratio*, new series 2 (1989): 138-52.

-----"Concepts, Experience and Inference," *Mind* 100 (1991): 495-505.

Millar, Roderick, "A Defence of Direct Surface Realism," *Philosophy* 57 (1982): 339-55.

Millikan, Ruth Garrett, "Thoughts Without Laws; Cognitive Science With Content," *Philosophical Review* 95 (1986): 47-80.

-----"Perceptual Content and Fregean Myth," *Mind* 100 (1991): 439-59.

Morick, Harold, "Is Ultimate Epistemic Authority A Distinguishing Characteristic of the Psychological?" *American Philosophical Quarterly* 3 (1971): 292-5.

Mundle, C.W.K., "Common Sense Versus Mr. Hirst's Theory of Perception," *Proceedings of the Aristotelian Society* 60 (1959-60): 61-78.

-----*Perception: Facts and Theories*, Oxford: Oxford University Press, 1971.

Myers, G.E., "Perception and the 'Time-Lag' Argument," *Analysis* 17 (1956-57): 97-102.

-----"Perception and the Sentience Hypothesis," *Mind* 72 (1963): 111-20.

Nagel, Thomas, "Armstrong on the Mind," *Philosophical Review* 79 (1970): 394-403.

-----"What Is It Like to Be a Bat?" in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980: 159-68.

Neisser, U., *Cognitive Psychology*, New York: Appelon, 1967.

Nelson, John O., "An Examination of D.M. Armstrong's Theory of Perception," *American Philosophical Quarterly* 1 (1964): 154-60.

Nemirow, Laurence, "Physicalism and the Cognitive Role of Acquaintance," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 490-9.

Oakes, Robert, "Seeing Our Own Faces: A Paradigm for Indirect Realism," *Philosophy and Phenomenological Research* 42 (1981-82): 442-8.

Odegard, Douglas, "Perception," *Dialogue* 17 (1978): 72-91.

O'Shaughnessy, Brian, "Seeing the Light," *Proceedings of the Aristotelian Society*, new series 85 (1984-85): 193-218.

-----"The Diversity and Unity of Action and Perception," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 216-66.

Owens, David, book review of Colin McGinn's *Mental Content*, *Mind* 99 (1990): 113-22.

Owens, Joseph, "Functionalism and Propositional Attitudes," *Noûs* 17 (1983): 529-49.

-----"In defense of a Different Doppelgänger," *Philosophical Review* 96 (1987): 521-54.

Pappas, George S., "Seeing<sub>e</sub> and Seeing<sub>n</sub>," *Mind* 85 (1976): 171-88.

-----"Armstrong's Materialism," *Canadian Journal of Philosophy* 7 (1977): 569-92.

-----"Perception Without Belief," *Ratio* 19 (1977), 142-61.

Peacocke, Christopher, *Sense and Content: Experience, Thought, and Their Relations*, Oxford: Oxford University Press, 1983.

-----"Scenarios, Concepts and Perception," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 105-35.

Pears, D.F., "The Causal Conditions of Perception," *Synthese* 33 (1976): 25-40.

-----"The Function of Acquaintance in Russell's Philosophy," *Synthese* 46 (1981): 149-65.

Pendlebury, Michael, "Perceptual Representation," *Proceedings of the Aristotelian Society* 87 (1986-87): 91-106.

Penrose, L.S. and R. Penrose, "Impossible Objects: A Special Type of Visual Illusion," *British Journal of Psychology* 49 (1958): 31-3.

Pettit, Philip, "Realism and Response-Dependence," *Mind* 100 (1991): 587-626.



Pickering, F.R., "Is Light the Proper Object of Vision?" *Mind* 84 (1975): 119-21.

Pitcher, George, *A Theory of Perception*, Princeton: Princeton University Press, 1971.

Podgorny, Peter and Roger N. Shepard, "Functional Representations Common to Visual Perception and Imagination," *Journal of Experimental Psychology: Human Perception and Performance* 4 (1978): 21-35.

Potter, Richard C., "The Theory of Self-Appearing," *Philosophy and Phenomenological Research* 46 (1986): 615-30.

Price, H.H., *Perception*, London: Methuen & Co. Ltd., 1950.

-----"The Given in Perception," in *Philosophic Problems*, Maurice Mandelbaum, Francis W. Gramlich, Alan Ross Anderson and Jerome B. Schneewind (eds.), New York: Macmillan, 1971: 262-73.

Priest, Stephen, *Theories of the Mind*, London: Penguin Books Ltd., 1991.

Putnam, Hilary, "The Meaning of 'Meaning'," in *Philosophical Papers Volume 2: Mind, Language and Reality*, Cambridge: Cambridge University Press, 1975: 215-71.

-----"Comment on Fodor's 'Cognitive Science and the Twin Earth Problem'," *Notre Dame Journal of Formal Logic* 23 (1982): 294-5.

-----*Representation and Reality*, Cambridge: The M.I.T. Press, 1988.

Pylyshyn, Zenon W., "Imagery and Artificial Intelligence," in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 170-93.

-----"The Imagery Debate: Analog Media Versus Tacit Knowledge," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 151-206.

-----"What's In a Mind?" *Synthese* 70 (1987): 97-122.

Quillen, Keith, "Perceptual Belief and Psychological Explanation," *Philosophical Quarterly* 39 (1989): 276-93.

Quine, W.V., "Russell's Ontological Development," in *Bertrand Russell*, D.F. Pears (ed.), New York: Doubleday & Company, Inc., 1972: 290-304.

Quinton, Anthony M., "The Problem of Perception," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965: 497-526.

Reed, Stephen K., "Structural Descriptions and the Limitations of Visual Images," *Memory and Cognition* 2 (1974): 329-36.

Reid, Thomas, *An Inquiry Into the Human Mind*, Timothy Duggan (ed.), Chicago: The University of Chicago Press, 1970.

Rey, Georges, "Introduction: What are Mental Images?" in *Readings in the Philosophy of Psychology: Volume 2*, Ned Block (ed.), Cambridge: Harvard University Press, 1981: 117-27.

Robinson, Howard, "The Irrelevance of Intentionality to Perception," *Philosophical Quarterly* 24 (1974): 300-15.

-----"The General Form of the Argument for Berkeleian Idealism," in *Essays on Berkeley: A Tercentennial Celebration*, John Foster and Howard Robinson (eds.), Oxford: Clarendon Press, 1988: 163-86.

-----"The Objects of Perceptual Experience II," *Proceedings of the Aristotelian Society*, supplementary volume 64 (1990): 151-66.

-----"Experience and Externalism: A Reply to Peter Smith," *Proceedings of the Aristotelian Society*, new series 92 (1991-92): 221-3.

Rock, Irvin, Wheeler, Deborah and Tudor, Leslie, "Can We Imagine How Objects Look from Other Viewpoints?" *Cognitive Psychology* 21 (1989): 185-210.

Rogers, G.A.J., "The Veil of Perception," *Mind* 84 (1975): 210-24.

Rorty, Richard, "Incorrigibility As the Mark of the Mental," *Journal of Philosophy* 67 (1970): 399-424.

Rosenthal, David M., "Intentionality," in *Studies In the Philosophy of Mind, Midwest Studies in Philosophy*, volume 10, Peter A. French, Theodore E. Uehling and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1986: 151-84.

Runzo, Joseph, "The Propositional Structure of Perception," *American Philosophical Quarterly* 14 (1977): 211-20.

-----"The Radical Conceptualization of Perceptual Experience," *American Philosophical Quarterly* 19 (1982): 205-17.

Russell, Bertrand, *The Analysis of Mind*, London: George Allen & Unwin Ltd., 1933.

-----*The Analysis of Matter*, New York: Dover Publications, Inc., 1954.

-----"Knowledge by Acquaintance and Knowledge by Description," in *Mysticism and Logic*, Harmondsworth: Penguin Books Ltd., 1954: 197-218.

-----*Human Knowledge: Its Scope and Limits*, New York: Simon and Schuster, Inc., 1964.

-----*The Problems of Philosophy*, Oxford: Oxford University Press, 1983.

-----"On the Nature of Acquaintance," in *Logic and Knowledge*, Robert Charles Marsh (ed.), London: George Allen & Unwin Ltd., 1984: 127-74.

-----*Theory of Knowledge: The 1913 Manuscript*, Elizabeth Ramsden Eames (ed.) in collaboration with Kenneth Blackwell, London: George Allen & Unwin, 1984.

Russell, James, *Explaining Mental Life: Some Philosophical Issues in Psychology*, London: Macmillan Press Ltd., 1984.

Ryle, Gilbert, *Dilemmas*, London: Cambridge University Press, 1969.

Sainsbury, Mark, "Russell on Acquaintance," in *Philosophers Ancient and Modern*, Godfrey Vesey (ed.), Cambridge: Cambridge University Press, 1987: 219-44.

Sanford, David H., "The Primary Objects of Perception," *Mind* 85 (1976): 189-208.

-----"Illusions and Sense-Data," in *The Foundations of Analytic Philosophy, Midwest Studies in Philosophy*, volume 6, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1981: 371-85.

Savitt, Steven F., "Absolute Informational Content," *Synthese* 70 (1987): 185-90.

Schwartz, Robert, "Imagery--There's More to It Than Meets the Eye," in *Imagery*, Ned Block (ed.), Cambridge: The M.I.T. Press, 1981: 109-29.

Searle, John R., "What is an Intentional State?" *Mind* 88 (1979): 74-92.

-----"Author's Response: Intrinsic Intentionality," *Behavioral and Brain Sciences* 3 (1980): 450-7.

-----"Minds, Brains, and Programs," *Behavioral and Brain Sciences* 3 (1980): 417-24.

-----"Intentionality and Its Place in Nature," *Synthese* 61 (1984): 3-16.

-----*Intentionality: An Essay in the Philosophy of Mind*, Cambridge: Cambridge University Press, 1987.

-----*The Rediscovery of the Mind*, Cambridge: The M.I.T. Press, 1992.

-----"Response: Meaning, Intentionality, and Speech Acts," "Response: Perception and the Satisfactions of Intentionality" and "Response: Reference and Intentionality," in *John Searle and His Critics*, Ernest Lepore and Robert Van Gulick (eds.), Oxford: Blackwell Publishers, Inc., 1993: 81-102, 181-92 and 227-41.

Segal, Gabriel, "Defence of a Reasonable Individualism," *Mind* 100 (1991): 485-94.

Segal, Sydney Joelson, "Processing of the Stimulus in Imagery and Perception," in *Imagery: Current Cognitive Approaches*, Sydney Joelson Segal (ed.), New York: Academic Press, Inc., 1971: 69-100.

Sellars, Wilfrid, "Sensa or Sensings: Reflections on the Ontology of Perception," *Philosophical Studies* 41 (1982): 83-111.

Shakespeare, William, *Macbeth*, Ware: Wordsworth Editions Ltd., 1993.

Shepard, R.N., "The Mental Image," *American Psychologist* 33 (1978): 125-37.

Shepard, R.N. and J. Metzler, "Mental Rotation of Three-Dimensional Objects," *Science* 171 (1971): 701-3.

Shoemaker, Sydney, "Functionalism and Qualia," in *Readings in the Philosophy of Psychology: Volume 1*, Ned Block (ed.), Cambridge: Harvard University Press, 1980: 251-67.

----- "Absent Qualia are Impossible--A Reply to Block," *Philosophical Review* 90 (1981): 581-99.

-----"The Inverted Spectrum," *Journal of Philosophy* 79 (1982): 357-81.

-----"Qualities and Qualia: What's in the Mind?" *Philosophy and Phenomenological Research*, supplement 50 (1990): 109-31.

-----"Qualia and Consciousness," *Mind* 100 (1991): 507-24.

Shwayder, D.S., "The Varieties and the Objects of Visual Phenomena," *Mind* 70 (1961): 307-30.

Sibley, F.N., book review of D.M. Armstrong's *Perception and the Physical World*, *Philosophical Review* 73 (1964): 404-8.

-----"Seeking, Scrutinizing, and Seeing," in *The Philosophy of Perception*, G.J. Warnock (ed.), Oxford: Oxford University Press, 1967: 127-49.

-----"Analysing Seeing I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 81-132.

Simon, Herbert A., "On the Forms of Mental Representation," in *Perception and Cognition: Issues in the Foundations of Psychology*, *Minnesota Studies in the Philosophy of Science*, volume 9, C. Wade Savage (ed.), Minneapolis: University of Minnesota Press, 1978: 3-18.

Slezak, Peter, "Reinterpreting Images," *Analysis* 50 (1990): 235-43.

Smith, David Woodruff, "The Realism in Perception," *Noûs* 16 (1982): 42-55.

-----"Is This a Dagger I See Before Me?" *Synthese* 54 (1983): 95-114.

-----"Content and Context of Perception," *Synthese* 61 (1984): 61-87.

Smith, Peter, "On 'The Objects of Perceptual Experience'," *Proceedings of the Aristotelian Society*, new series 91 (1990-91): 191-6.

Smith, Peter and O.R. Jones, *The Philosophy of Mind: An Introduction*, Cambridge: Cambridge University Press, 1988.

Snowdon, Paul, "Perception, Vision and Causation," *Proceedings of the Aristotelian Society*, new series 81 (1980-81): 175-92.

-----"The Objects of Perceptual Experience I," *Proceedings of the Aristotelian Society*, supplementary volume 64 (1990): 121-50.

-----"How to Interpret 'Direct Perception,'" in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 48-78.

Sperling, George, "The Information Available in Brief Visual Presentations," *Psychological Monographs* 74 (1960), whole number 498.

Sprigge, Timothy L.S., "Final Causes," *Proceedings of the Aristotelian Society*, supplementary volume 45 (1971): 149-70.

Squires, J.E.R., "Visualising," *Mind* 77 (1968): 58-67.

Stainsby, H.V., "Sight and Sense-Data," *Mind* 79 (1970): 170-87.

Stalnaker, Robert, "On What's In the Head," in *Philosophy of Mind and Action Theory, Philosophical Perspectives*, volume 3, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1989: 287-316.

Sterelny, Kim, "Mental Representation: What Language is Brainsese?" *Philosophical Studies* 43 (1983): 365-82.

-----"The Imagery Debate," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 607-26.

Stoneham, Tom, "Comment on Davies: A General Dilemma?" *Proceedings of the Aristotelian Society* 92 (1992): 225-31.

Strawson, P.F., "Perception and Its Objects," in *Perception and Identity*, G.F. Macdonald (ed.), Ithaca: Cornell University Press, 1979: 41-60.

Stroll, Avrum, "The Role of Surfaces in an Ecological Theory of Perception," *Philosophy and Phenomenological Research* 46 (1986): 437-53.

Suchting, W.A., "Perception and the Time-Gap Argument," *Philosophical Quarterly* 19 (1969): 46-56.

Swain, Marshall, "Alston's Internalistic Externalism," in *Epistemology, Philosophical Perspectives*, volume 2, James E. Tomberlin (ed.), Atascadero: Ridgeview Publishing Company, 1988: 461-73.

Taylor, D.M., "On What is Seen II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 13-22.

Taylor, Richard and Timothy Duggan, "On Seeing Double," *Philosophical Quarterly* 8 (1958): 171-4.



- Thompson, David L. "Intentionality and Causality in John Searle," *Canadian Journal of Philosophy* 16 (1986): 83-97.
- Turner, J.E., *A Theory of Direct Realism*, London: George Allen & Unwin Ltd., 1925.
- Turvey, M.T., "Contrasting Orientations to the Theory of Visual Information Processing," *Psychological Review* 84 (1977): 67-88.
- Tye, Michael, "A Causal Analysis of Seeing," *Philosophy and Phenomenological Research* 42 (1981-82): 311-25.
- "The Adverbial Approach to Visual Experience," *Philosophical Review* 93 (1984): 195-225.
- "The Debate About Mental Imagery," *Journal of Philosophy* 81 (1984): 678-91.
- "The Subjective Qualities of Experience," *Mind* 95 (1986): 1-17.
- "The Picture Theory of Mental Images," *Philosophical Review* 97 (1988): 497-520.
- "Visual Qualia and Visual Content," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 158-76.
- Unger, Peter, "Our Knowledge of the Material World," *American Philosophical Quarterly*, monograph series 4 (1970): 40-61.
- Valberg, J.J., "The Puzzle of Experience," in *The Contents of Experience: Essays on Perception*, Tim Crane (ed.), Cambridge: Cambridge University Press, 1992: 18-47.
- Van Gulick, Robert, "A Functionalist Plea for Self-Consciousness," *Philosophical Review* 97 (1988): 149-81.
- "Functionalism, Information and Content," in *Mind and Cognition: A Reader*, William G. Lycan (ed.), Oxford: Basil Blackwell Ltd., 1992: 107-29.
- Vaughan, Rachel, "Searle's Narrow Content," *Ratio*, new series 2 (1989): 185-90.
- Vesey, G.N.A., "Seeing and Seeing As," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Doubleday & Company, Inc., 1965: 68-83.
- "Agent and Spectator: The Double-Aspect Theory," in *The Human Agent, Royal Institute of Philosophy Lectures*, volume 1, 1966-67, G.N.A. Vesey (ed.), London: Macmillan & Co. Ltd., 1968: 139-59.
- "Analysing Seeing II," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 133-37.
- Perception*, Garden City: Doubleday & Company, Inc., 1971.
- "Chairman's Remarks," commenting on Richard L. Gregory's "Perceptions as Hypotheses" and G.E.M. Anscombe's "Comment on Professor R.L. Gregory's Paper," in

*Philosophy of Psychology*, S.C. Brown (ed.), London: The Macmillan Press Ltd., 1974: 221-30.

-----"Self-Acquaintance and the Meaning of 'I,'" in *Bertrand Russell Memorial Volume*, George W. Roberts (ed.), London: George Allen & Unwin Ltd., 1979: 339-47.

Von Eckardt, Barbara, "Mental Images and their Explanations," *Journal of Philosophy* 81 (1984): 691-3.

Ward, Andrew, "Direct and Indirect Realism," *American Philosophical Quarterly* 13 (1976): 287-94.

Warfield, Ted A., "Privileged Self-Knowledge and Externalism Are Compatible," *Analysis* 52 (1992): 232-7.

Warnock, G.J., book review of D.M. Armstrong's *Perception and the Physical World* and Berkeley's *Theory of Vision*, *Philosophical Quarterly* 12 (1962): 373-4.

-----"Seeing" and "Postscript, 1963," in *Perceiving, Sensing, and Knowing*, Robert J. Swartz (ed.), Garden City: Anchor Books, 1965: 49-65 and 66-7.

-----critical notice of Fred I. Dretske's *Seeing and Knowing*, *Mind* 79 (1970), 281-7.

-----"On What is Seen I," in *Perception: A Philosophical Symposium*, F.N. Sibley (ed.), London: Methuen & Co. Ltd., 1971: 1-11.

-----J.L. Austin, London: Routledge, 1991.

Weiskrantz, L., E.K. Warrington, M.D. Saunders and J. Marshall, "Visual Capacity in the Hemianopic Field Following a Restricted Occipital Ablation," *Brain* 97 (1974): 709-28.

White, Alan R., "Symposium: The Causal Theory of Perception," *Proceedings of the Aristotelian Society*, supplementary volume 35 (1961): 153-68.

-----"Seeing What is Not There," *Proceedings of the Aristotelian Society* 70 (1969-70): 61-74.

-----"Knowledge, Acquaintance, and Awareness," in *The Foundations of Analytic Philosophy, Midwest Studies in Philosophy*, volume 6, Peter A. French, Theodore E. Uehling, Jr. and Howard K. Wettstein (eds.), Minneapolis: University of Minnesota Press, 1981: 159-72.

-----"Visualizing and Imagining Seeing," *Analysis* 47 (1987): 221-4.

White, Nicholas P., "Prof. Shoemaker and So-Called 'Qualia' of Experience," *Philosophical Studies* 47 (1985): 369-83.

Wiggins, David, "Freedom, Knowledge, Belief and Causality," in *Knowledge and Necessity, Royal Institute of Philosophy Lectures*, volume 3, 1968-69, London: Macmillan & Co. Ltd., 1970: 132-54.

Wollheim, Richard, "The Difference Between Sensing and Observing II," *Proceedings of the Aristotelian Society*, supplementary volume 28 (1954): 219-40.

Wright, Edmond, "Perception: A New Theory," *American Philosophical Quarterly* 14 (1977): 273-86.

-----"Yet More On Non-Epistemic Seeing," *Mind* 90 (1981): 586-91.

-----"Inspecting Images," *Philosophy* 58 (1983): 57-72.

-----"Inspecting Images: A Reply to Smythies," *Philosophy* 65 (1990): 225-8.

Yolton, John W., "Perceptual Consciousness," in *Knowledge and Necessity*, Royal Institute of Philosophy Lectures, volume 3, 1968-69, foreword by G.N.A. Vesey, London: Macmillan and Co. Ltd., 1970: 34-50.

Ziedins, R., "Knowledge, Belief and Perceptual Experiences," *Australasian Journal of Philosophy* 44 (1966): 70-88.

-----"The Possibility of Scepticism About Perception," *Philosophical Quarterly* 16 (1966): 329-40